FORUM

on Corrections Research

September 2007, Volume 19, Number 1

Featured issue

Academic contributions

Perspectives

Programming research

Sex offender research

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Gender research

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FORUM ON CORRECTIONS RESEARCH is published once or twice a year in both English and French for the staff and management of the Correctional Service of Canada and the international corrections community.

FORUM reviews applied research related to corrections policy, programming and management issues. It also features original articles contributed by staff of the Correctional Service of Canada and other international researchers and practitioners.

FORUM is prepared and published by the Research Branch of the Correctional Service of Canada.

To request information regarding the content of FORUM, copies of FORUM, or articles for reprint, please contact:

Research Branch
Correctional Service of Canada
340 Laurier Avenue West
Ottawa, Ontario, Canada K1A 0P9

Facsimile: (613) 941-8477
E-mail: ***research@csc-scc.gc.ca***

Canada Post
Publication mail agreement no.
40063960

Editor:	Michael Margolian
Assistant Editor:	Tanya Nouwens Gurberg
Typesetting and Layout:	Computer Composition of Canada, Inc.
Printing:	Gilmore Printing Services

Sections of the magazine with no acknowledgement of authorship have been researched and written by the staff of the Research Branch, Correctional Service of Canada.

FORUM strives to present a variety opinions on, and approaches to, current issues in corrections.

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Adhering to principles of effective correctional treatment: Academic musings of a former clinician and administrator

J. Stephen Wormith[1]
Chair in Forensic Psychology, University of Saskatchewan

The now classic article by Andrews, Bonta and Hoge (1990) on risk, need and responsivity (RNR) as core principles of effective correctional intervention has been followed by a host of research papers in various publications including Forum on Corrections Research *and the* Compendium 2000 on Effective Correctional Programming.[2] *These subsequent papers have examined, empirically validated, expanded upon and solidified RNR's position, not only in correctional theory and practice but also in the lexicon of corrections discourse. One paper in particular takes these principles beyond the commonly accepted characteristics of clinically relevant programming – i.e., risk, need and responsivity – by including setting, staff, implementation and integrity issues, to generate a total of 18 principles of effective correctional intervention (Andrews, 2001).*

This paper is a reflection on some of Andrews' (2001) principles by an academic who, in random order and by coincidence more than anything else, has worn the shoes of a correctional administrator, clinician and researcher. Although administrative issues arise with each of these principles, let us begin with a sample of those that are relatively straightforward to implement at the organizational level and then move to some that can be difficult and problematic.

Adhering to the responsivity principle

General responsivity is one of the easier principles for a correctional agency to embrace. Soliciting a group of clinicians and researchers who know the offender treatment literature, including meta-analyses, can now, with considerable efficiency, produce a treatment program, with a standardized curriculum, that is cognitive-behavioural (CBT) in design and delivery and incorporates the elements commonly considered 'best practice' in current correctional practice. This is likely to include such components as relapse prevention, as well as numerous CBT techniques such as role playing, practice, cognitive rehearsal and homework. Accreditation panels of experts can then be established with some ease to evaluate the 'integrity' of these services as a set of evaluation criteria may be derived quite directly from the principle of general responsivity.

The concern, however, indeed the 'knock' against what has become widespread practice, has been the so-called 'one size fits all' approach to offender treatment. The rebuttal of course is that such concerns can be accommodated by the 'specific responsivity' principle in that, of course, these programs are sensitive to the individual learning styles, demographic characteristics (e.g., race, gender) and strengths of the offender clientele. But are they? Although some programs are actually able to blend general with specific responsivity principles while maintaining the standard, and presumably more efficient, group format (the treatment of developmentally delayed sex offenders and aboriginal substance abusers are two common examples), the 'cookie cutter' criticism against other programs seems all too apt.

Indeed, the idiosyncrasies of individual clients are often too specific to be accommodated in a group format. In such instances, the only way to provide a clinical service that is really capable of adhering to specific responsivity is through individual treatment sessions. In the rush for efficiency and the quest to adhere to general responsivity, traditional one-on-one clinical services have receded from the minds of many correctional administrators, clinicians and researchers. Although still commonly practiced and indeed the norm among probation officers, researchers in particular should be devoting more time to investigating the crucial variables that have an impact on the outcome of individual client services and the factors that may interact with specific responsivity factors on such an outcome.

Adhering to the need principle

In this day and age, the need principle also lends itself to fairly easy implementation in correctional treatment settings. In large part, this is because of the proliferation of research (particularly meta-analyses) that espouses and demonstrates the superior effectiveness of programs and services that address the criminogenic needs of individual offenders

(Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990; Aos, Miller & Drake, 2006; Dowden & Andrews, 2000; McGuire, 2005). The outcome of these programs in terms of reduced recidivism is considerably better than non-specific general counselling and psychotherapy.

Another kind of problem is to accept the proposition that a program will affect outcome even though it does not target a criminogenic need specifically, but sounds like it might.

An important caveat, of course, is that the designated treatment must address a criminogenic need of the offender who is participating in such a program. In other words, the offender referred to a substance abuse program must have a substance abuse problem if the program is to demonstrate a positive outcome for this specific client.

This principle may be violated by some clinicians and administrators who have a penchant for finding a problem where one does not really exist. This may occur particularly when a program is accessible (i.e., it is ready to begin and has vacancies). Believing that 'something is better than nothing,' one may be tempted to refer the offender to a treatment program because it is indeed designed to address a research-proven criminogenic need.

Another kind of problem is to accept the proposition that a program will affect outcome even though it does not target a criminogenic need specifically, but sounds like it might. Some of the kinds of programs that have been proposed to reduce recidivism are quite laughable. Gendreau and colleagues have gone to some length to expose them (Gendreau, Goggin, French & Smith, 2006; Latessa, Cullen & Gendreau, 2002). Others may be less clear and, indeed, may have a certain amount of intuitive appeal to the correctional administrator and clinician, although they remain untested.

Here, a 'catch-22' may occur in that their potential impact remains a mystery until they are researched, and many self-respecting researchers dare not tread in these uncharted research waters. Moreover, what administrator is willing to risk his or her scarce treatment resources and even scarcer research expertise to undertake such an evaluation?

Indeed, only a few examples of this kind of treatment evaluation research exist (Richardson-Taylor & Blanchette, 2001). More organizations should be prepared to consider evaluation research of less common kinds of intervention.

Adhering to the risk principle

Although simple enough on paper, adherence to the risk principle is perhaps the most difficult treatment-related task of the correctional administrator. Consider the high-risk, poorly motivated and disruptive offender in a specialized treatment setting, such as the Correctional Service of Canada's regional treatment facilities or the provincial facility, the Ontario Correctional Institute. These are intensive, dedicated treatment institutions whose relatively few beds (typically about 200 beds to serve a catchment area that may accommodate up to 2,000 inmates) are considered a premium and therefore are the subject of considerable bureaucratic pressure to make the most of them. The treatment setting may be dedicated to particular types of offenders (e.g., sexual, violent, substance abusing, or mentally disordered offenders), or it may be a generic treatment environment devoted to addressing a range of antisocial attitudes and behaviours.

Clinicians and front-line workers in these settings often become frustrated by having to work with the high-risk, poorly motivated and disruptive offender who is taking up valuable treatment space. They may at times make a plea for transferring the offender back to a non-specialized institution based on the offender's poor motivation, lack of progress, deterioration or what may appear to be 'sabotage' of treatment efforts, and disruptive behaviour that negates staff efforts with other offenders. On the other hand, the offender is described as very high risk on both static historical and dynamic criminogenic needs.

In this context, the administrator must consider the realities of the justice system. The offender is most likely serving a fixed sentence and his or her release date has been predetermined. Even the option of detaining an offender, if he or she is serving a federal sentence, to the expiration of the warrant is only a stop-gap measure that delays the inevitable release of a high-risk offender and runs the risk of exacerbating the situation by releasing said offender without any kind of community supervision. Moreover, the correctional administrator realizes that the only safeguard to the latter circumstance is the rarely used Section 810 Order which requires a return to court with an application from the Crown attorney to apply post-sentence conditions. In sum, it is out of the correctional administrator's hands.

Moreover, the offender may have been assessed as being psychopathic. Such a diagnosis compounds

the deliberations as to whether one should pursue treatment with the offender any further. A well known 'Penetang treatment study' suggests to some clinical professionals and administrators that it is a waste of time to fill these scarce treatment facility beds with such offenders (Rice, Harris & Cormier, 1992). But treatment advocates remind us that the current treatment programs the offender is participating in are a far cry from the kind of treatment (a therapeutic community) that was evaluated by the Penetang group, thus rendering it irrelevant to the question at hand.

In fact, others have found that there is not an overall body of literature indicating that treatment of psychopathic offenders does not work (D'Silva, Duggan & McCarthy, 2004). Others have found that some psychopathic (sexual) offenders who do well in treatment have lower recidivism rates than those who do not do well in treatment (Langton, Barbaree, Harkins & Peacock, 2006). Finally, Steve Wong and Robert Hare (2005) have gone so far as to actually develop a treatment protocol for psychopathic offenders.

So, should one 'sacrifice' the offender in question by expelling the offender from treatment and return him or her to a traditional prison environment, for the benefit of the remaining offenders in treatment who would otherwise be denied the full impact of their intensive treatment program and for the benefit of the staff who would otherwise be at risk of becoming disillusioned about the treatment enterprise and burning out?

In the end, it is a difficult decision. Does one allow the high-risk, problematic offender to 'escape' from the often stressful environment of a treatment setting or does one persevere in the face of what appear to be great odds? If one chooses the latter, it is important that staff appreciate and accept the rationale for doing so. It is also vital that they be prepared for the most resistant of clients, trained in the use of motivational interviewing and related techniques as part of their treatment approach, and understand the changes most offenders have to go through to realize true change (Cox & Klinger, 2004; Miller & Rollnick, 2002; Prochaska & DiClemente, 1984).

Adhering to professional discretion

Allowing professional discretion, Andrews' 13th principle, is one that is embraced by some correctional clinicians and administrators and distained by others.

This divergence of opinion is seen most frequently in the area of offender risk assessment, particularly when invoking a 'clinical' override to an actuarial or statistically derived 'objective' assessment of offender risk. Some correctional agencies encourage its use in the quest for improved prediction, as do some researchers search for 'incremental validity' to standardized risk assessment schemes (Wormith & Goldstone, 1984). Some approaches to risk assessment, commonly referred to as 'structured clinical judgment,' are actually built around the integration of statistical and clinical approaches to risk assessment (Lindsay & Beail, 2004; Webster, Douglas, Eaves & Hart, 1997).

Yet, fearful of losing the predictive accuracy of specific tools and the gains being made for the science of risk assessment, other researchers, clinicians and even some correctional agencies remain adamant about not interfering with a good thing (Quinsey, undated).

This can leave the administrative decision maker, such as a parole board member, in a quandary when the statistical tool suggests one kind of prognosis, while the sincere and well meaning clinician suggests another outcome believing that the current case represents the exception (something that can and does occur) to the actuarial prediction.

Similarly, professional discretion can play a role in treatment planning for an individual offender. There may indeed be occasions when an argument can be made for addressing what traditionally might be considered a 'non-criminogenic need' or, at worst, a minor concern. It may be hypothesized that the 'problem' (e.g., anxiety) represents an important criminogenic need for a specific offender and, if it is not addressed, the offender is very likely to reoffend.

Barring any new research that might shed light on such circumstances, there is no clear rule of thumb to follow when presented with such a scenario. On the one hand, the 'safe' position is to adhere to the actuarial prognostic and treatment of empirically demonstrated criminogenic needs. On the other hand, the principle of professional discretion acknowledges that idiosyncratic clients exist, and that clinicians can improve upon the standard 'cookie cutter' approaches to offender assessment and intervention.

Hopefully, these individual case 'experiments' will lead to the kind of systematic research that is required to establish more specific treatment guidelines for the clinician to practice and the administrator to endorse.

Adhering to implementation principles

Andrews' 17th principle places the responsibility for implementing the core correctional principles

squarely on correctional management. He believes that the correctional administrator is best positioned to create a milieu in which treatment will be most effective. By encouraging, perhaps demanding, a treatment friendly environment, correctional programming can grow and develop into a highly professional and effective service.

The obstacle to creating such an atmosphere in correctional settings has been the traditional disconnect between security and treatment, where different elements see their mandate as the ***only*** fundamental objective of the correctional setting. Too often, they fail to appreciate the goals of the other and end up working at cross purposes, competing with, rather than complementing, each other. Although it is easy to say that the two factions should work together to achieve a common goal – greater public safety for the community – there are often fundamentally different world views within these two factions as to how such a goal is best achieved.

Theory and empirical research can only go so far to limit these differences. Ultimately, correctional management must forge a working team of clinicians and front-line correctional staff. There is no easy solution, only hard work and persistence.

Conclusion

It has become fashionable in research and bureaucratic circles to talk about 'technology transfer,' the translation of scientific findings to practice in the real world. To be fully implemented, technology transfer must exist at both the individual and organizational level.

In corrections, this requires both the front-line clinician and the corporate administrator to contribute to the process at their respective levels. Only if they are in sync with each other will the maximum benefit of the science, in this case the principles of effective correctional intervention, be realized in the field. ■

[1] Chair in Forensic Psychology, University of Saskatchewan, Department of Psychology, 9 Campus Drive, Saskatoon, Saskatchewan S7N 5A5; e-mail: s.wormith@usask.ca.

[2] For descriptions of these principles and empirical research validating their relevance to correctional treatment, the reader is referred to the following papers:
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Andrews, D.A. (in press). The risk-need-responsivity model of assessment and human service in prevention and corrections: Rehabilitative jurisprudence. *Canadian Journal of Criminology and Criminal Justice (in press)*;
Andrews, D.A., Bonta, J., & Wormith, J.S. (2006). The recent past and near future of risk and/or need assessment. *Crime & Delinquency, 52*, 7-27;
Dowden, C., & Andrews, D.A. (1999, May). What works in young offender treatment: A meta-analysis. *Forum on Corrections Research, 11*(2), 21-24;
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The relationship between program participation, institutional misconduct and recidivism among federally sentenced adult male offenders[1]

Paula Smith[2] and Paul Gendreau[3]
Department of Psychology, University of New Brunswick (Saint John)

The reality of the prison research literature is that very little is known about the changes in inmates' experiences and activities in prison over time and the relationship between these changes and recidivism (Bonta & Gendreau, 1990; DeLisi, 2003). Remarkably few studies in the last 40 years have measured behavioural change, and then only for very brief periods and on small samples (Bennett, 1974; Bolton, Smith, Heskin & Banister, 1976; Gendreau, Madden & Leipciger, 1979; Walters, 2003; Walters, Trgovac, Rychlec, DiFazio & Olson, 2002; Wormith, 1984; Zamble, 1992).

Moreover, the great majority of the literature on the effects of imprisonment rests on single-occasion and cross-sectional studies, some of which extend over long time periods (see Bonta & Gendreau, 1990; Wormith, 1984). These cross-sectional designs often assume that change occurs in a linear fashion at the same rate across individuals.

The purpose of this research[4] was to generate evidence that follows the progress of inmates while incarcerated and assesses whether their program activities over time are predictive of institutional misconduct and recidivism.

. . . we can examine whether programs that target the criminogenic needs of higher risk offenders have better effects on recidivism.

Longitudinal studies have considerable implications for prison case management practices. First, they allow us to examine whether offenders' behaviour in prison and changes therein are predictors of recidivism. Much of parole decision making is predicated on this assumption (Glaser & Stratton, 1972). Furthermore, the principles of effective treatment can be tested as to their applicability to prison settings (see Andrews & Bonta, 2003; Gendreau, 1996). More specifically, we can examine whether programs that target the criminogenic needs of higher risk offenders have better effects on recidivism. Finally, the magnitude of the recidivism effect size of criminogenic programs can be compared to that of other "routine" treatment programs (e.g., Lipsey, 1999).

Method

Sample

The sample for this study included a total of 5,469 adult male offenders who: 1) had served a minimum of six consecutive months in a federal penitentiary in Canada (the maximum was over 10 years with a mean average of 31.2 months); 2) had been released into the community between January 1, 1999, and December 31, 2001; and 3) had an official record available for verification of recidivism.

Outcome data and data on the within-prison variables of interest were extracted from the computerized database (Offender Management System, or OMS) maintained by Correctional Service Canada (CSC) in accordance with its policies and procedures.

Independent variables

Demographic characteristics. Information was available on the age, race, marital status, level of education, and previous criminal history of each offender included in the database.

Composite risk measure. The Statistical Information on Recidivism-Revised (SIR-R1) Scale was used to classify the risk level of inmates included in this study. This scale combines measures of demographic characteristics and criminal history to generate estimates of the risk for recidivism among federally sentenced offenders (Bonta, Harman, Hann & Cormier, 1996).

Program participation. Criminogenic programs were those identified as employing behavioural approaches (e.g., radical behavioural, social learning, cognitive) and/or targeting criminogenic needs. Non-criminogenic programs were those identified as either: 1) not behavioural in nature (e.g., non-directive, psychodynamic, group milieu); and/or 2) targeting non-criminogenic needs (e.g., self-esteem, personal distress).

The first author and a second rater were involved in categorizing programs as criminogenic or non-criminogenic. While the raters had access to the names/titles of programs via the OMS database, they did not have access to the program manuals of individual programs. The agreement among the two raters was greater than 90% in classifying programs as criminogenic or non-criminogenic. Programs for which adequate information was not available to designate the program as either criminogenic or non-criminogenic were not included in the analyses.

Dependent variables

Incidents and segregation. Two types of prison misconduct are represented in the OMS database, namely institutional incidents (e.g., possession of contraband, minor disturbance, assault on inmate, assault on staff) and segregation (which is reserved for inmates who commit the most serious infractions). The total number of institutional incidents in which the offender was identified as the perpetrator was used as an outcome variable. Similarly, the total number of placements in segregation was calculated for each inmate and used as an outcome variable. Placements in administrative segregation were excluded as these inmates are placed in lockup for their protection from others.

Revocation and reincarceration. Two official measures of recidivism, revocation and reincarceration, were downloaded from OMS for the follow-up period of two years post-release from prison. Revocation included both technical violations of parole conditions as well as the commission of new crimes, while reincarceration involved readmissions to prison under a Warrant of Committal for a new crime only.

Results

Demographic characteristics

The average (mean) age of the sample was 34.6 years [standard deviation (*SD*) = 10.90] with a range of 16 to 81 years. Most inmates were Caucasian (83.3%). Approximately half of the sample (55.8%) was identified as single, separated, divorced or widowed, while 43.8% were married or living common law. Most of the inmates (67.2%) did not possess a high school diploma or equivalent.

About 37.4% had been convicted of a violent offence as part of their current sentence. About two thirds had been previously convicted of an offence. Specifically, 6.9% had one previous offence on their record, 12.9% had two to four previous offences, 13.4% had five to nine previous offences, and 23.6% had ten or more previous offences on their record.

As to their risk level, 13.5% of the sample was classified as low risk, 41.1% was classified as moderate risk, and 45.4% was classified as high risk.

During the follow-up period, 44.5% had their parole revoked for a technical violation, while 28.8% were reincarcerated for a new crime. About one quarter (25.1%) were both revoked for a technical violation and reincarcerated for a new crime. Taken together, almost half of the inmates (48.2% or 2,638) recidivated.

Program participation and recidivism

The analyses were based on Pearson *r* correlations and the use of confidence intervals (*CIs*) to assess and compare the utility of individual effect sizes and comparisons among predictors and treatments. Data was evaluated by examining the magnitude of effect sizes (i.e., correlations between criterion and outcome) and the width of *CIs*. A *CI* with a width greater than .10 was defined as warranting caution for the purposes of making policy (see Smithson, 2003).

Tables 1 and 2 summarize the degree to which criminogenic and non-criminogenic programs predicted outcome across the three risk levels.

Criminogenic programs and risk level. Tables 1 and 2 indicate that, for *low-risk* offenders, criminogenic programs were associated with an *increase* in institutional incidents, segregation and revocation. The correlations (*r* values) ranged between .05 and .14. The width of the *CIs* was greater than .10. For *moderate-* and *high-risk* offenders, criminogenic programs were associated with *decreases* in segregation, revocation and reincarceration (*r* values between -.02 and -.11). The width of the *CIs* was less than .10.

Non-criminogenic programs and risk level. Non-criminogenic programs were associated with an *increase* in all measures of misconduct and recidivism for *low-risk* offenders (*r* values between .04 and .11). The width of the *CIs* was greater than .10. For *moderate-* and *high-risk* inmates, non-criminogenic programs were associated with *increases* in every measure except revocation among moderate-risk inmates, where there was no association. The effect was most pronounced for incidents and segregation (*r* values between .12 and .19). The width of the *CIs* was less than .10.

. . . the higher the ratio of criminogenic to non-criminogenic programs, the lower the recidivism rate.

Table 1

Correlations between Program Participation and Misconducts by Risk Level

		Incidents		Segregation	
	N	*r*	*CI*	*r*	*CI*
Criminogenic programs					
Low-risk offenders	622	.14**	.06 to .22	.05	-.03 to .13
Moderate-risk offenders	2,004	.13**	.09 to .17	-.04	-.08 to .00
High-risk offenders	2,203	.03	-.01 to .07	-.05	-.09 to .01
Total	4,936	.09**	.06 to .12	-.03	-.06 to .00
Non-criminogenic programs					
Low-risk offenders	622	.05	-.03 to .13	.07	-.01 to .15
Moderate-risk offenders	2,004	.19**	.15 to .23	.12**	.08 to .16
High-risk offenders	2,203	.14**	.10 to .18	.15**	.11 to .19
Total	4,936	.16**	.13 to .19	.13**	.10 to .16

r = Pearson correlation coefficient
CI = confidence interval
**$p < .01$

Table 2

Correlations between Program Participation and Recidivism by Risk Level

		Revocation		Reincarceration	
	N	*r*	*CI*	*r*	*CI*
Criminogenic programs					
Low-risk offenders	622	.06	-.02 to .14	-.01	-.09 to .07
Moderate-risk offenders	2,004	-.02	-.06 to .02	-.09**	-.13 to -.05
High-risk offenders	2,203	-.04	-.08 to .00	-.11**	-.15 to -.07
Total	4,936	.02	.01 to .05	-.05**	-.08 to -.02
Non-criminogenic programs					
Low-risk offenders	622	.04	-.04 to .12	.11**	.03 to .19
Moderate-risk offenders	2,004	.00	-.04 to .04	.02	-.02 to .06
High-risk offenders	2,203	.02	-.02 to .06	.03	-.01 to .07
Total	4,936	.05**	.02 to .08	.06**	.03 to .09

r = Pearson correlation coefficient
CI = confidence interval
**$p < .01$, *$p < .05$

Table 3 presents another approach to analyzing the link between programming and recidivism. Whereas the previous analyses correlated the total number of criminogenic or non-criminogenic programs received by an inmate with an outcome (misconduct or recidivism), Table 3 presents a *density* or *difference score*. This is the number of criminogenic programs *minus* the number of non-criminogenic programs that each inmate received. If the resulting score is a positive value (e.g., +1), it means the inmate had taken more criminogenic than non-criminogenic programs. If the result is a negative value (e.g., -1), it means the inmate had taken more non-criminogenic than criminogenic programs. Presumably, the greater the ratio in favour of criminogenic programs, the better the result.

Consistent with this hypothesis, the results in Table 3 reveal that the higher the ratio of criminogenic to non-criminogenic programs, the lower the recidivism rate. With one exception (0 vs. -1), there was a progression of less recidivism the more criminogenic programs taken.

Table 3

Comparison of Recidivism Rates for Inmates Receiving More versus Less Criminogenic Programming[a]

	N	% Recidivists
Difference score[b]		
+2 and above	2,104	25.7
+1	1,165	27.5
0	1,443	33.3
-1	150	31.3
-2 and below	74	50.0

[a] Higher difference scores indicate more criminogenic than non-criminogenic programming.
[b] Difference score = total # of criminogenic programs *minus* total # of non-criminogenic programs.

Discussion

A problem that often occurs with large databases to be found in any social service agency has to do with record-keeping procedure. In this study, there was some data missing as well as a lack of standardization for reporting some variables. More information on the nature of various treatments employed within the prisons would have been helpful. It should be noted, however, that the OMS data system of CSC was not initially designed as a research tool.

Furthermore, generalization of these results is limited to male offenders who were incarcerated during the timeframe of study. It should be recognized that the profile of male offenders being admitted to federal prisons in Canada since 2001 might be changing somewhat. Prison systems are not necessarily static; they can evolve in their ways of handling offenders, which in turn can affect the therapeutic integrity of treatment.

Lastly, a meta-analytic perspective regarding the current results merits comment. That is, primary studies are not ends in themselves; oftentimes their contributions are quite modest (Schmidt, 1992). Replication is necessary, even for a study with a large sample size like this one, not only for the reasons noted previously but also because the estimated precision of some of the treatment effects for lower risk offenders in this investigation (as indicated by the *CI*s) is not yet adequate. In our opinion, some of the effect size estimates must be narrowed if one is to have enough certainty to responsibly generate policies for managing prisons more effectively (see Gendreau, Goggin & Smith, 2000).

The limitations of this study notwithstanding, to date only a handful of studies have examined changes in offender behaviour in prison (Bonta & Gendreau, 1990). Moreover, these studies were conducted years ago, with small samples and over brief time periods. As such, the results of this study contribute to the existing literature by confirming the principles of effective intervention. First, criminogenic programs were associated with an increase in institutional incidents for low-risk offenders, smaller increases in segregation and revocations, and little relationship with reincarceration. This result for post-release recidivism outcomes is consistent with the offender treatment literature where it has been reported that offender treatment programs have very little effect among lower risk offenders or sometimes produce marginal increases in anti-social behaviours (Andrews & Bonta, 2003; Andrews, Bonta & Hoge, 1990).

Second, low-risk prisoners do not benefit, and may be adversely affected (as evidenced by increased misconducts and recidivism), as a result of being exposed to programming, particularly of a non-criminogenic nature. The results also suggest that lower risk offenders should be diverted from prisons as much as possible. This suggestion has been made repeatedly in corrections literature and has gone largely unheeded. For example, Bonta and Motiuk (1992) have documented how often low-risk offenders have been unnecessarily incarcerated (e.g., the estimates can be disconcerting, up to 38%). The width of *CI*s for much of the data reported for low-risk inmates in the study is large, however, thereby indicating the need for further replication of the results.

. . . a wealth of literature has demonstrated that higher risk offenders benefit from criminogenic programs . . . .

Third, a wealth of literature has demonstrated that higher risk offenders benefit from criminogenic programs (Andrews & Bonta, 2003; Gendreau, 1996; Gendreau, Goggin, French & Smith, 2006). The results from this study (r = -.11, *CI* = -.15 to -.07) were consistent with previous research.

While the effect sizes reported in this article – that is, the impact that program participation seemed to have on misconducts and recidivism – may not seem large at face value, it should be noted that the corrections literature is replete with examples that small effect sizes (5% to 10%, sometimes less, see Cohen, 1998) have major cost-benefit implications. The present results were better than Lipsey's (1999) results for routine programs and similar to the

German and UK prison programs (Egg, Pearson, Cleland & Lipton, 2000; Ortmann, 2000). Furthermore, the present results may represent underestimates since virtually every inmate admitted to a federal penitentiary is enrolled in a program, thus not allowing for a "pure" comparison of offenders who took programs versus none at all.

Finally, non-criminogenic programs definitely had negative effects on higher risk inmates in the present study, indicating that the types of programs higher risk offenders receive while incarcerated should be carefully vetted. ■

[1] Manuscript based on findings excerpted from Smith, P. (2006). *The effects of incarceration on recidivism: A longitudinal examination of program participation and institutional adjustment in federally sentenced adult male offenders.*. Unpublished doctoral dissertation. University of New Brunswick (Saint John). Advisor: Paul Gendreau.

[2] Assistant Professor, Division of Criminal Justice, University of Cincinnati, 600 Dyer Hall, PO Box 210389, Cincinnati, Ohio, USA 45221-0389; e-mail: paula.smith@uc.edu.

[3] Professor Emeritus, Department of Psychology, University of New Brunswick *and* Visiting Scholar, Division of Criminal Justice, University of Cincinnati, 1223 Jacques Cartier Drive, Beresford, New Brunswick, Canada E8K 3N3; e-mail: paulgend@nb.aibn.com.

[4] This research was funded by the Addictions Research Centre of Correctional Service Canada (Reference # 2003-CSC-CA-1206) and the Social Sciences and Humanities Research Council (Award # 752-2002-1666). The authors are indebted to Dr. Christopher Lowenkamp, Dr. Larry Motiuk, and Ben Vuong for their assistance in seeing this project to its completion. Also, we thank Dr. Brian Grant and Kevin Munroe for their advice and support.

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Detention with sexual offenders: Can we do better?[1]

Andrew M. Haag[2]
Counselling Psychology, University of Calgary

Justifiably, there is a great deal of public concern with regard to sexual offenders (Brown, 1999; Banister & Pordham, 1994; Hogue, 1993). Moreover, the question as to the most appropriate response strategy with sexual offenders can become politically and emotionally charged. The fact that an issue is charged, however, does not provide licence for ignoring empirical data on a topic.

In particular, it is important to, as accurately as possible, determine the level of dangerousness that any one offender actually presents at any one given time. This implies that careful attention should be paid to the predictive accuracy of our decision making with offenders.

This article seeks to explore the predictive accuracy of one of the more invasive forms of decision making in Canada: detention.

Background

In Canada, detention refers to an intentional decision on the part of the National Parole Board of Canada (NPB) to confine a federally sentenced offender (i.e., someone sentenced to two years or more) past his or her regular statutory release date (Department of Justice Canada, 1992a and 1992b). An offender reaches the statutory release date at the two-thirds point in the sentence. The decision to detain an offender is made by the NPB if it is believed that the offender is likely to commit a violent or sexual offence or a serious drug offence *prior to the expiry* of his or her court-imposed sentence. In Canada, the date at which an offender's sentence ends/expires is also referred to as the warrant expiry date (WED). All sexual offenders with a determinate federal sentence in Canada are potentially eligible for detention.

In making the decision to detain, according to section 132 of the *Corrections and Conditional Release Act*, the NPB is obligated to consider any factor that they deem relevant to determining the likelihood of a future serious offence, including: 1) patterns of persistent violence or sexual behaviour involving children; 2) the seriousness of the current offence; 3) reliable information suggesting that the offender has difficulty controlling violent/sexual impulses; 4) the use of a weapon in any offence; 5) explicit threats of violence; 6) behaviour of a brutal nature in any offence; 7) a substantial degree of indifference; 8) medical, psychiatric or psychological evidence; 9) reliable information concerning offence planning; 10) the availability of appropriate supervision programs; 11) the number of sexual offences involving a child; 12) behaviour of a sexual nature associated with the commission of any offence; and 13) reliable information about the offender's sexual preferences indicating that the offender is likely to commit a sexual offence involving a child.

Missing from this list is any legal obligation for the NPB to consider actuarial data. Hopefully, however, this information would be included in potential psychiatric or psychological reports submitted to the NPB.

The topic of detention has been the subject of prior research. In particular, Johnson (2002) sought to determine if there is a bias in the criminal justice system against sexual offenders. Specifically, Johnson (2002) found that sexual offenders were (1) given more restrictive types of release than other offenders and (2) released later in their sentence than other offenders. It was interesting to note that these same sexual offenders had lower rates of reoffending than the comparison group considered.

In a different review by Grant (1996), it was found that detained offenders were more likely to have been convicted of a sexual offence than those who were not detained. This was interpreted by Grant to suggest that detention decisions disproportionately affect sexual offenders.

The aim of this study was to further explore detention among sexual offenders. In particular, this study sought to examine the predictive validity of the NPB decision-making process with sexual offenders.

Method

Participants

The participants of this study consisted of every sexual offender under federal custody in Canada who had a WED in 1995. A sexual offence was defined as an offence meeting the Static-99 definition for a sexual offence (Hanson & Thornton, 1999; Harris, Phenix, Hanson & Thornton, 2003). In other words, this study examined a cohort of federally

sentenced sexual offenders across Canada. As this methodological approach largely lacked a selection bias, it was thought to increase the generalizability of the findings to all federally sentenced sexual offenders in Canada.

The total number of potential participants for this project was 775 male sexual offenders who reached warrant expiry in 1995. All participants were 18 years of age or older. This study did use exclusion criteria, however. Specifically, this study excluded offenders who: 1) were deported or it was documented that they voluntarily left the country (26 participants); 2) died prior to the conclusion of the follow-up period (19 participants); 3) received a pardon during the follow-up period (15 participants); 4) successfully appealed their convictions or sentence lengths (15 participants); or 5) did not meet the Static-99 definition of a sexual offence (26 participants) (Hanson & Thornton, 1999; Harris, Phenix, Hanson & Thornton, 2003).

After the above exclusions, the project was left with a cohort of 674 male sexual offenders who had reached warrant expiry in 1995.

Variables considered

For this study, the independent variable considered was the decision by the National Parole Board of Canada with regard to the detention of the sexual offenders in the participant pool.

The dependent variable of concern was sexual recidivism, which was defined as convictions for sexual offences within seven years after warrant expiry. Sexual recidivism data was obtained from the Canadian Police Information Centre (CPIC) records (i.e., Canadian criminal records checks – a national record of all convictions for any one offender as maintained by the courts and the Royal Canadian Mounted Police).

Results

Descriptive statistics

The average (mean) age and sentence length of the sexual offenders in this cohort are reported in Table 1. Overall, participants were, on average, about 41 years old at warrant expiry and had a sentence of just over four years.

With regard to conditional release, about one in five offenders (21.5% or 145) were detained until their warrant expiry date. About two in five offenders (40.7% or 274) were released on their statutory release date (i.e., at the two-thirds point in their sentence). Another 2.2% (15) were released on statutory release but subsequently had their

Table 1

Mean Age and Sentence Lengths

Variable	Mean	Standard deviation
Age at warrant expiry	40.82 years	11.47 years
Sentence length	1,570 days (4.3 years)	1,013 days

statutory release revoked; the revocation then led to these offenders only being released at their warrant expiry date. About one in four offenders (26.4% or 178) were released on day parole, and 8.2% (55) were released on full parole. Seven offenders voluntarily chose to wave their statutory release date and were released on their warrant expiry date.

Sexual recidivism and detention were found to be significantly correlated overall . . . .

It should be noted that the above figures represent the point at which an offender initiated a continual release until their warrant expiry date. In other words, if an offender received a conditional release which was then revoked for some reason, and the offender was then subsequently released on another conditional release at a future date, the figure above would document the second (or last) conditional release as the start of their time in the community prior to warrant expiry.

The global recidivism rate for the cohort of sexual offenders was 14.4%, meaning 97 offenders were convicted of another sexual offence within the follow-up period of seven years after warrant expiry.

Sexual recidivism and detention were found to be significantly correlated overall ($r = .20$, $p < .01$). Moreover, when the ROC curve analysis was performed, there was noted to be a moderate predictive relationship between detention and sexual recidivism (AUC = .615, *Std. Error* = .03, 95% *CI* = .55 to .68). The relationship between detention decisions and sexual recidivism remained consistent regardless of statistical controls for time in the community prior to warrant expiry ($r = .14$, $p < .01$).

Table 2 documents the correlation between detention and sexual recidivism based on treatment status. Treatment for this data set was defined as any intervention noted to CSC files that was specifically designed to address sexual offending behaviour. Treatment status was categorized by indicating

. . . the ability of the National Parole Board to accurately detain sexual offenders was only statistically significant with programming completers.

whether the offender had: 1) completed programming; 2) declined to accept programming (programming non-starter); or 3) started programming and then left for any reason (programming drop-out). There were then separate predictive analyses performed for detention and recidivism based on treatment completion status. This data provides evidence that the ability of the National Parole Board to accurately detain sexual offenders was only statistically significant with programming completers. This level of statistical significance was not observed with programming drop-outs or programming non-starters.

Table 2

Correlation between Detention and Sexual Recidivism based on Treatment Status

Programming status*	*n*	*r*	*p*
Completed	461	.25	.01
Non-Starter	171	.08	.32
Drop-Out	41	.28	.07

* Please note that this writer was not able to determine the treatment status of one of the offenders in the current participant pool.

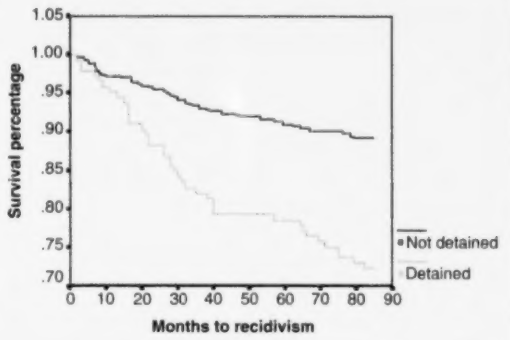
The details of a survival analysis comparing detained and non-detained offenders are noted in Figure 1. A survival analysis is a graphical method that analyzes the time to the occurrence of an event. In this case, the event in question was sexual recidivism. The graph illustrates the percentage of offenders in different groups (in this case detained versus not detained) who recidivated over various lengths of time. The results indicate that detained offenders did not last as long in the community before committing a new sexual offence as compared to the offenders who were not detained.

Discussion

The results of the current study suggest that, on the whole, the NPB appears to be appropriately detaining sexual offenders who go on to commit future sexual crimes with some degree of accuracy. Certainly, this finding in and of itself was encouraging.

Figure 1

Sexual Recidivism and Detention: Survival over Seven Years



When further analysis was performed, however, it was found that the NPB's ability to appropriately detain offenders decreased to non-significance among those who had either dropped out of programming or never started programming. From the current data, it is not possible to know why the predictive accuracy decreased for these other groups. Certainly, further analysis of this would be a fruitful area for future research.

It is suggested ... that the accuracy of NPB detention decisions could be improved by more strongly considering actuarial measures in their decision making with regard to detention.

As a global comment, despite statistical significance, the NPB's detention decision was still only somewhat better than chance overall. In other words, there is a great deal of room for improvement. The predictive power of the NPB's decision making is still considerably less than the levels of accuracy reported by actuarial measures such as the Static-99 or Static-2002 with regard to sexual recidivism (Hanson & Thornton, 1999; Hanson & Thornton, 2003). Given the literature outlining the superiority of actuarial methods globally to that of clinical decision making, this latter comparison is not surprising (Grove & Meehl, 1996). It is suggested, however, that the accuracy of NPB detention decisions could be improved by more strongly considering actuarial measures in their decision making with regard to detention. ■

[1] Manuscript based on findings excerpted from Haag, A.M. (2005). *Do psychological interventions impact on actuarial measures: An analysis of the predictive validity of the Static-99 and Static-2002 on a re-conviction measure of sexual recidivism.* Unpublished doctoral dissertation. Calgary, Alberta: University of Calgary. Advisor: Dr. Lee Handy.

[2] Dr. Andrew M. Haag, c/o Bowden Institution Psychology Department, P.O. Box 6000, Innisfail, Alberta T4G 1V1; e-mail: haagam@csc-scc.gc.ca.

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Predicting sex offender program attrition: The role of denial, motivation and treatment readiness[1]

Mark Latendresse[2]
Department of Psychology, Carleton University

This study examined denial, minimization, motivation and treatment readiness in relation to sex offender treatment outcome in a heterogeneous sample of 449 sex offenders.

Treatment non-completion or drop-out is common among sex offenders. It is therefore important to determine which offenders would benefit from pre-treatment sessions aimed at reducing or removing those factors that prevent the offender from fully benefiting from treatment.

Key findings from this study demonstrate that denial, minimization and possibly treatment readiness are predictors of treatment non-completion among sex offenders. These responsivity factors seemingly affect whether or not an offender completes treatment, even after taking risk into account. It may therefore be worthwhile to assess denial, minimization and treatment readiness before assigning sex offenders to a specific treatment program.

Background

As a result of public concern in Canada, there has been widespread implementation of sex offender treatment programs aimed at reducing sexual reoffending (Polizzi, MacKenzie & Hickman, 1999). Regardless of ongoing debate concerning the efficacy of sex offender treatment, recent research demonstrates that sex offenders treated with current cognitive behavioural approaches will benefit from treatment, and that this treatment will result in modestly reduced recidivism rates for this population (Abracen & Looman, 2004).

. . . this study examined the relationship between treatment readiness, motivation, minimization and denial status ... and determined if these variables predict sex offender treatment outcome.

In fact, the contentious question of treatment efficacy with sex offenders has overshadowed and prevented the advancement of more detailed research on factors affecting treatment outcome, such as treatment readiness, motivation and denial. The responsivity principle is an important concept directly related to increasing behavioural change, and warrants greater systematic investigation. Treatment readiness, motivation, denial and minimization are specific responsivity factors that have started to be investigated in the correctional literature as potential mediators or predictors of treatment outcome.

As mentioned, treatment non-completion or drop-out is common among sex offenders. Attrition rates are highly variable across programs, offender types, and institutions, rendering it difficult to yield a precise estimate. Attrition rates in sex offender treatment programs range from 20% to 58% in institutional settings (Geer, Becker, Gray & Krauss, 2001) and from 17% to 47% in community-based programs (Craissati & Beech, 2001). Research suggests that attending to responsivity factors during the planning and delivery phases of treatment increases the probability that an offender will complete the intervention, which in turn will reduce the likelihood of reoffending (Dowden & Serin, 2001).

Present study

The purpose of this study was to further investigate the relationship between treatment readiness, motivation, denial, minimization and treatment outcome (i.e., attrition status) in a heterogeneous sample of incarcerated sex offenders. Specifically, this study examined the relationship between treatment readiness, motivation, minimization and denial status (specific responsivity variables) and determined if these variables predict sex offender treatment outcome.

Methodology

Participants in the present study consisted of adult male sex offenders under the responsibility of Correctional Service Canada (CSC) who were assessed at Millhaven Institution. The sex offender sample included rapists, extra-familial child molesters, intra-familial child molesters, and mixed sex offenders (adult and child victims).

This study divided sex offender treatment participants into three groups: 1) treatment *completers*, 2) treatment *drop-outs*, i.e., those who did not complete the program due to either offender-

initiated drop-out or agency expulsion from treatment, and 3) treatment *non-completers*, i.e., those who did not complete the program for either personal or administrative reasons (e.g., transferred, program cancelled, offender released).

Participants ranged in age from 19 to 76 at time of admission to treatment, with a mean age of 43.59 years [standard deviation (*SD*) = 12.42]. The ethnic composition of the total sample was as follows: Caucasian - 79.2%, Black - 9.2%, Aboriginal - 7.1%, and other - 4.5%. In terms of marital status, most offenders (42.2%) were single, 17.6% were married, 14.5% were in a common-law relationship, 12.5% were separated, 11.4% were divorced, and 1.8% were other. The average sentence length for the sample was 4.21 years (*SD* = 3.38).

The denial and minimization checklist (DMCL) (Barbaree, 1991), treatment readiness scale (Serin, Kennedy & Mailloux, 2002) and motivation index[3] were used to measure the four responsivity variables. The Static-99 was used to control for offender risk level (Hanson & Thornton, 1999).

Results

This study involved 448 male sex offenders admitted to Millhaven Institution for assessment between December 1999 and September 2005. The attrition rate for these offenders was 11.2% during their current sentence; that is, of the 448 offenders, 11.2% (50) dropped out or did not complete sex offender treatment they had begun. Specifically, 398 completed the sex offender program, 17 of the participants were classified as drop-outs, and 33 failed to complete the treatment program for administrative or personal reasons.

The descriptive statistics and correlations for the psychometric tests used in this study are presented in Tables 1 and 2, respectively.

Overall, there were no significant differences between the treatment completers, drop-outs and non-completers in terms of their average minimization total scores [F (2, 445) = 0.05, $p < .95$]. Similarly, there was no significant difference between groups on their average motivation index scores [F (2, 445) = 1.55, $p < .22$]. Both minimization and motivation were similar across each of the three treatment outcome groups. Please note that the denial component of the DMCL is measured as yes/no and could not be compared across groups using ANOVA.

Conversely, there were statistically significant differences across treatment outcome groups on the Static-99 [F (2, 445) = 4.11, $p < .02$] and the treatment readiness scale [F (2, 445) = 3.61, $p < .03$]. The drop-out group scored significantly higher on the Static-99 (indicating higher risk) than both the completer and non-completer groups. On the treatment readiness scale (TRS), average total scores were highest for the completer group, followed by the non-completer group, and lowest for the drop-out group. Note that on the TRS, higher scores indicate being more ready for treatment.

. . . higher levels of risk were associated with lower levels of motivation.

Table 2 presents the correlations for the total sample between the DMCL total minimization score, motivation index, Static-99, and the TRS total scores. Higher levels of treatment readiness were associated with higher levels of motivation (as measured by the motivation index), denial, higher levels of minimization, and treatment outcome (i.e., program completion). The Static-99 was negatively associated with motivation level; in other words, higher levels

Table 1

Descriptive Statistics for Psychometric Measures by Treatment Outcome Group

Variable	Total N = 448		Completers n = 398		Dropouts n = 17		Non-Completers n = 33	
	M[a]	SD[b]	M	SD	M	SD	M	SD
Minimization total	2.87	2.49	2.86	2.40	3.06	3.04	2.88	2.89
Motivation level	2.05	0.43	2.06	0.43	1.88	0.33	2.00	0.50
Static-99*	3.21	2.22	3.16	2.21	4.71	1.57	3.06	2.38
TRS total*	29.86	14.30	30.49	14.14	23.35	13.56	25.67	15.46

[a] M = Mean score
[b] SD = Standard deviation
* Statistically significant differences

Table 2

Correlation Coefficients for the Treatment Readiness Scale and Other Responsivity Factors

	1	2	3	4	5	6
1. [a]TRS total	1					
2. [a]Static-99	-.09	1				
3. [a]Denial	-.37**	-.01	1			
4. [a]Minimization total	.20**	-.03	-.52**	1		
5. [a]Motivation level	.44**	-.24**	-.24	.09	1	
6. [a]Program outcome	-.12**	.07	.14**	.01	-.07	1

*$p < .05$, **$p < .01$; [a]Bonferonni Correction Family Wise, $p < .01$

. . . denial was associated with lower levels of minimization and lower levels of treatment readiness.

of risk were associated with lower levels of motivation. Denial was negatively associated with minimization and treatment readiness; in other words, denial was associated with lower levels of minimization and lower levels of treatment readiness.

A sequential logistic regression was conducted with treatment attrition status (i.e., treatment completed or not completed) as the outcome variable. Logistic regression permits the prediction of a discrete outcome, such as treatment completion/non-completion, from a set of predictor variables that may be continuous, discrete, dichotomous, or a combination of these. In this study, treatment attrition was coded as a discrete outcome. Due to the small number of drop-outs (17), they were combined with the non-completers so that we had two treatment outcomes for the regression analysis: treatment completed and treatment not completed. As predictor variables – that is, variables used to try to predict treatment outcome – age, denial, minimization, motivation, risk (static-99) and treatment readiness were used in the model.

Static-99 scores and offender age at the beginning of treatment were entered first to ensure that the other predictors in the equation were predicting treatment attrition independently of the risk related variables. In the second block, denial (yes, no), minimization total scores, motivation index scores, and treatment readiness total scores were entered together into the equation. The model correctly classified treatment attrition status for 88.8% of the 448 participants.

Table 3 shows the results of the logistic regression. According to the Wald statistic, denial and minimization were significant predictors of treatment attrition status, while there was a trend towards significance for the TRS ($p = .06$). Offender age, the motivation index and the Static-99 score did not significantly predict treatment attrition status.

Table 3

Results of Logistic Regression Analysis Predicting Treatment Attrition Status

Variable	β	*SE* β	Wald	Odds Ratio	*CI* Odds
Step 1					
Age	-0.01	0.01	0.63	0.99	0.97 – 1.02
Static-99	0.08	0.07	1.20	1.08	0.94 – 1.24
Step 2					
Denial	-1.20	0.38	9.92**	0.30	0.14 – 0.64
Minimization	0.18	0.07	6.41**	1.19	1.04 – 1.37
Motivation	0.14	0.43	0.11	1.15	0.49 – 2.68
TRS	-0.02	0.01	3.38[a]	0.98	0.95 – 1.01

** $p < .01$; [a] $p < .07$

Put simply, offenders who admitted the sexual assault that led to their criminal conviction were significantly more likely to complete treatment than those who were classified as deniers. Similarly, lower levels of minimization were associated with treatment completion. The motivation index was not significantly related to treatment outcome, and, surprisingly, completers and non-completers demonstrated comparable scores in this area.

Discussion and conclusions

This study identified denial, minimization and treatment readiness as specific responsivity factors worthy of assessment prior to assigning sex offenders to a specific treatment program. These responsivity factors seemingly affect whether or not an offender completes treatment, even after taking risk into account.

Interestingly, the overall attrition rate for this group of sex offenders was 11.2%, a very low rate compared to other sex offender treatment programs where the attrition rates ranged from 20% to 58% in institutional settings.

The current programming model implemented by CSC may contribute to the lower rate of attrition among sex offenders. CSC sex offender programs take a cognitive-behavioural approach with an emphasis on reducing the risk of sexual recidivism by means of self-management and implementing external controls. Furthermore, the program intensity is matched to each offender's risk and need

level, so that higher risk offenders are assigned to longer and more intensive treatment. This means that lower risk offenders are not subjected to long, intense treatment programs which may result in their dropping out because of being forced to continue treatment after having reached acceptable levels of functioning with respect to treatment targets. ■

[1] Manuscript based on findings excerpted from Latendresse, M. (2006). *Predicting Sex Offender Program Attrition: The Role of Denial, Motivation, and Treatment Readiness.* Unpublished Master's thesis. Ottawa, ON: Carleton University. Advisor: Ralph C. Serin.

[2] Mark Latendresse, Office of Research, Surveillance & Evaluation, Tobacco Control Programme, Health Canada, 123 Slater (A712), Ottawa, Ontario K1A 0K9; email: mark_latendresse@hc-sc.gc.ca.

[3] The Offender Management System (OMS) includes an index of motivation (rated by the case management officer) that indicates an offender's willingness or desire to participate in recommended correctional treatment programs.

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Indirectly measuring what child sexual abusers think about themselves and children[1]

Kevin L. Nunes[2]
Department of Psychology, Carleton University

This article briefly summarizes recent research by Nunes, Firestone and Baldwin (2007). An indirect measurement procedure, called the Implicit Association Test (IAT), was adapted to measure cognitions regarding self and children among 27 extrafamilial child molesters and 29 non-sex offenders. As expected, child molesters viewed children as more sexually attractive than did non-sex offenders. Among the molesters, viewing children as more sexually attractive and powerful was associated with greater risk of sexual recidivism as measured by actuarial risk assessment instruments. This research demonstrated that the IAT has much promise as a tool with which to study cognitions associated with sexual offending against children.

In current treatment programs delivered to sex offenders supervised by Correctional Service Canada (CSC), much effort is directed at remedying child molesters' problematic cognitions concerning themselves, their victims and other adults (Marshall, Anderson & Fernandez, 1999; Yates, Goguen, Nicholaichuk, Williams & Long, 2000). Many theorists have posited that these cognitions play a central role in offending. For example, it has been suggested that viewing self (relative to others) as negative, socially weak and sexually unattractive; and viewing children (relative to adults) as positive, socially weak and sexually attractive may play a role in the initiation as well as persistence of the sexual abuse of children (Finkelhor, 1984; Hall & Hirschman, 1992; Marshall & Barbaree, 1990). However, knowledge in the area remains incomplete due in part to limitations, such as susceptibility to dishonest responding, associated with some existing approaches to measurement.

In contrast to many of the assessment procedures commonly used with sex offenders, there is a procedure called the Implicit Association Test (Greenwald, McGhee & Schwartz, 1998) that is relatively easy to administer, inexpensive and unaffected by attempts at deceptive responding (see Nosek, Greenwald & Banaji, 2007, for a review). The Implicit Association Test (IAT) is a relative measure of association strengths, which are inferred from response latencies (or reaction times) on various categorization tasks. A demonstration of the IAT procedure can be experienced at https://implicit.harvard.edu/implicit/. The IAT is described in more detail below.

Although few published studies have used the IAT with sex offenders (Gray, Brown, MacCulloch, Smith & Snowden, 2005; Mihailides, Devilly & Ward, 2004), the results are very encouraging. In the study summarized here (Nunes, Firestone & Baldwin, 2007), the primary goal was to use the IAT procedure to measure cognitions thought to play a role in child sexual abuse and test for the existence of differences between child molesters and non-sex offenders. In addition, the association between the IAT measures and risk of sexual recidivism was examined.

Method

Participants

Participants in the study were 27 extrafamilial child molesters and 29 non-sex offenders. All participants were adult male inmates in federal penitentiaries in the Ontario region of CSC.

Procedure

Implicit Association Test (IAT)

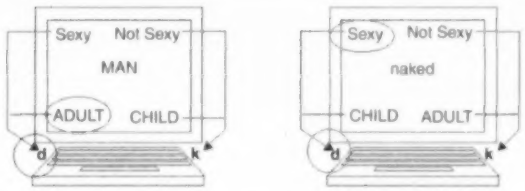
In the present study, IATs were designed to measure the domains of evaluation (pleasant vs. unpleasant), social power (powerful vs. weak) and sexual attractiveness (sexy vs. not sexy) in self (me vs. not me) and in children relative to adults (child vs. adult). This made for a total of six computer-administered IATs, which we called the *pleasant self IAT*, *powerful self IAT*, *sexy self IAT*, *pleasant child IAT*, *powerful child IAT*, and *sexy child IAT*. Each IAT consisted of one of two concepts (i.e., *me* vs. *not me* or *child* vs. *adult*) combined with one of three concepts (i.e., *pleasantness*, *powerfulness*, or *sexual attractiveness*).

The main components of the sexy child IAT are presented here to illustrate the procedure (see Figure 1). Participants were presented with a series of stimulus words in the centre of the computer screen that they sorted into one of four categories (*adult*, *child*, *sexy*, or *not sexy*) by pressing a computer key with either their left index finger (*d* key) or their right index finger (*k* key). Thus, two categories are indicated by one key while the remaining two categories are indicated by the other key. Response speed is expected to depend on the extent to which

the categories that share one key are associated in one's memory. For someone who is primarily sexually attracted to adults, response speed should be quicker when *sexy* and *adult* share the same response key (as in the first screen in Figure 1) than when *sexy* and *child* share the same response key (as in the second screen in Figure 1). Conversely, for someone who is sexually attracted to children, the reverse would be expected.

Figure 1

Example of Trials in the Sexy Child IAT



Note: Example of trials in the sexy child IAT, which was designed to assess one's view of children relative to adults on sexual attractiveness.

Risk of sexual recidivism

Risk of sexual recidivism was estimated with two validated and commonly used instruments: the Rapid Risk Assessment for Sexual Offense Recidivism (RRASOR) (Hanson, 1997) and the Static-99 (Hanson & Thornton, 2000). Scores on the RRASOR can range from 0 to 6 and scores on the Static-99 can range from 0 to 12. For both measures, higher scores reflect greater risk of sexual recidivism.

Results

IAT effects

Researchers commonly transform data on response times because they generally do not meet the assumptions required for many statistical analyses (Greenwald, McGhee & Schwartz, 1998). We followed the same procedure and calculated the natural logarithm (ln) of the raw response latencies (reaction times). This has the desired effect of bringing exceptionally slow responses closer to the rest of the response times while maintaining their original rank order. It is the transformed data on which all analyses were performed.

IAT *effects* were computed for each participant by subtracting his average (ln) response latency on the trials in one IAT condition (e.g., *adult* and *sexy* share the same response key) from his average response latency on the trials in the other condition (e.g., *child* and *sexy* share the same response key). Larger positive values on the pleasant self IAT, powerful self IAT, and the sexy self IAT effects suggest a view of self as, respectively, more pleasant, powerful and sexually attractive. With regard to the child IATs, larger positive values on the pleasant, powerful and sexy child IAT effects imply a view of children as, respectively, more pleasant, more powerful and more sexually attractive.

Comparing child molesters to non-sex offenders

One-way ANOVAs were performed to compare the child molesters and non-sex offenders on the IAT effects. In addition to significance tests, effect size estimates (correlation coefficient; *r*) were reported for each IAT effect to provide an indication of the magnitude of the differences between groups.

Table 1

Comparing Child Molesters to Non-Sex Offenders

	Non-Sex Offenders		Child Molesters			
IAT effect (ln)	***n***	***M* (*SD*)**	***n***	***M* (*SD*)**	***F***	***r***
Self						
Pleasant	28	0.26 (0.15)	25	0.33 (0.18)	1.83	.19
Powerful	28	0.01 (0.18)	26	0.01 (0.16)	0.02	.02
Sexy	27	0.31 (0.15)	21	0.24 (0.23)	1.27	-.16
Child						
Pleasant	29	0.00 (0.20)	27	0.08 (0.18)	2.49	.21
Powerful	28	-0.29 (0.15)	25	-0.27 (0.17)	0.30	.08
Sexy	29	-0.05 (0.20)	24	0.07 (0.16)	6.01*	.33

Note. Correlation coefficients (*r*) were reported as effect size estimates indicating the magnitude of the difference between groups.
ln = natural log; M = mean; SD = standard deviation.
* $p < .05$.

According to Cohen (1992), correlations around .10 are small, .30 are medium, and .50 are large. As shown in Table 1, only one of the analyses of the six IAT effects yielded results that were consistent with our theory-based expectations. The groups differed significantly in their sexy child IAT effects, suggesting that the child molesters viewed children as more sexually attractive than did the non-sex offenders.

. . . offenders who viewed children as more sexually attractive and more *powerful were at greater risk for sexual recidivism.*

Risk of sexual recidivism

In addition to comparing child molesters to non-sex offenders, it was also important to explore whether variation on the IATs was associated with risk of sexual recidivism. Only the child molesters were examined in these analyses. Risk was measured by the Static-99 and RRASOR, on which higher scores reflect greater risk of sexual recidivism. Average scores were 5.52 [standard deviation (*SD*) = 2.10] on the Static-99 and 3.26 (*SD* = 1.46) on the RRASOR.

Intercorrelations between the IAT effects (ln), the Static-99 and the RRASOR are presented in Table 2. As expected, greater risk on the Static-99 was significantly associated with higher sexy child IAT effects, which reflect a view of children as more sexually attractive. Contrary to expectations, however, greater risk on the RRASOR was significantly associated with higher powerful child IAT effects, which reflect a view of children as *more* powerful. Thus, offenders who viewed children as more sexually attractive and *more* powerful were at greater risk for sexual recidivism. There was also a trend toward significance in the expected direction with a more positive view of children on the pleasant child IAT associated with greater risk on the RRASOR ($p < .10$).

Discussion

As expected, child molesters viewed children as more sexually attractive than did non-sex offenders. Among the child molesters, viewing children as more sexually attractive and more powerful was associated with greater risk of sexual recidivism.

Although contrary to expectations, the association between the powerful child IAT and the RRASOR appears to fit well with justifications and rationalizations for sexual abuse of children sometimes endorsed by child molesters (Ward & Keenan, 1999) in which children are imbued with the power to make decisions about sexual activity with an adult (Abel, Becker & Cunningham-Rathner, 1984; Abel, Gore, Holland, Camp, Becker & Rathner, 1989; Bumby, 1996; Hanson, Gizzarelli & Scott, 1994).

The findings in the present study fit reasonably well with past research using penile plethysmography and viewing time to measure sexual interest in children (e.g., Abel, Jordan, Hand, Holland & Phipps, 2001; Barsetti, Earls, Lalaumière & Bélanger, 1998; Hanson & Morton-Bourgon, 2004; Hanson & Morton-Bourgon, 2005; Quinsey & Chaplin, 1988).

The current results have implications for the assessment and treatment of child molesters. The finding that greater risk of sexual recidivism was moderately associated, although not always significantly, with a view of children as more pleasant, powerful and sexually attractive as measured by the IAT suggests that these cognitions may be predictive of sexual recidivism. With the exception of sexual interest, cognitive predictors of sexual recidivism have been measured primarily by self-report methods with generally poor or unknown

Table 2

Intercorrelations between Measures of Risk and IAT Effects (ln) among Child Molesters

		IAT effect (ln)					
	RRASOR	Pleasant self	Powerful self	Sexy self	Pleasant child	Powerful child	Sexy child
Static-99	.78**	-.32	.28	.15	.05	.17	.43*
	(27)	(25)	(26)	(21)	(27)	(25)	(24)
RRASOR		-.31	.12	.23	.33†	.40*	.27
		(25)	(26)	(21)	(27)	(25)	(24)

Note. Sample size in parentheses. ln = natural log.
† $p < .10$. * $p < .05$. ** $p < .001$.

predictive validity (Hanson & Morton-Bourgon, 2004; Hanson & Morton-Bourgon, 2005). IAT measures may serve as a useful complement to existing assessment protocols in measuring cognitions thought to be related to risk of recidivism. Of course, application of the IAT to assessment and treatment would be contingent upon further encouraging results from a larger body of research (Gray, Brown, MacCulloch, Smith & Snowden, 2005; Nosek, Greenwald & Banaji, 2007).

Overall, the results of the current study suggest that (a) viewing children as sexually attractive may be a distinctive characteristic of child molesters compared to other criminals and (b) viewing children as more powerful and more sexually attractive may be associated with greater risk of sexual recidivism. The results suggest that the IAT has utility in assessing cognitions associated with sexually offending against children. The IAT appears to be a promising method of examining the cognitions of child molesters and an exciting area for future research. ■

[1] Manuscript based on findings excerpted from Nunes, K.L. (2005). *Implicitly measured cognitions of child molesters.* Unpublished doctoral dissertation. Ottawa, ON: University of Ottawa. Advisor: Dr. Philip Firestone.

[2] Loeb Building, 1125 Colonel By Drive, Ottawa, ON K1S 5B6; e-mail: kevin_nunes@carleton.ca.

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Seeing eye to eye: Parole officer and parolee views of crime desistance[1]

Karen Parhar[2] and Stephen C.P. Wong[3]
Department of Applied Social Psychology, University of Saskatchewan and Regional Psychiatric Centre (Prairies)

The primary objective of parole supervision is to help parolees live a more pro-social life in the community, that is, to desist from committing crime. Identifying factors that are perceived by parole officers and parolees to be important in crime desistance could improve success in parole supervision and the understanding of crime desistance.

Thirty-four parole officers and 61 parolees from six major cities in western Canada completed a 30-item survey questionnaire on how much (on a five-point rating scale) they agree or disagree with different markers for crime desistance. In a semi-structured interview, the same participants were also asked to respond to the general question of what they would consider to be important markers for crime desistance. The interview responses were content analyzed using the smallest meaningful unit of analysis.

Parolees and parole officers generally agreed on most factors related to crime desistance. Whereas parolees recognized important criminogenic and protective factors key to crime desistance when asked by way of the questionnaire, they tended, when interviewed, to place more emphasis on subjective and experiential factors such as motivation and encouragement than on external factors such as peer group and employment. Parole officers' views tended to be more balanced.

The similarities in the views of parole officers and parolees provide further support for the use of current approaches in parole supervision (Bonta & Cormier, 1999). However, parole officers should also pay attention to the parolees' personal and subjective views of what they consider to be important to them in crime desistance, an important responsivity factor.

For case management and service delivery in the community, parole officers with Correctional Service Canada use a general framework that includes a clear understanding of an offender's criminogenic needs or factors related to offending (Bonta & Cormier, 1999). Parole officers in many other jurisdictions use similar approaches. Although this approach is supported by empirical research, its use in parole supervision has been criticized recently for focusing too much on criminogenic factors (Farrall, 2002).

Crime desistance is "the cessation of a pattern of criminal behaviour" (p. 127, Sommers, Baskin & Fagan, 1994). Research on crime desistance can shed light on the criminal behaviours that can be appropriately targeted for correctional intervention and the most opportune time to intervene (Loeber & Stouthamer-Loeber, 1996). A number of theories of crime desistance consider positive and stabilizing social influences such as marriage, steady employment and association with prosocial peers as likely causes of crime desistance (Sampson & Laub, 1993; Warr, 1998). Empirical research on factors related to crime desistance is still in its infancy and, at this time, there is no empirically validated theory of crime desistance.

Identifying parole officers' views and beliefs about factors related to crime desistance is important. Parole officers' perspectives about what will improve their clients' success may influence their decision making, such as recommendations on the management of parolees or even decisions to revoke or not to revoke parole (Katz, 1982; Duffee, 1975). As well, parole officers' philosophical orientations, such as whether they are punitive or rehabilitation oriented, may affect their behaviour on the job and the outcome of cases under their supervision (Dembo, 1972).

A parole officer's views of crime desistance may also influence the supervisory relationship, which has been found to be related to self-reports of improved self-esteem and better chances of crime desistance by parolees (Kyvsgaard, 2000). However, parole officers and parolees have been found to differ in their opinions regarding parole, the primary purpose of which is to encourage and support crime desistance (Hussey & Briggs, 1980). Differences in parole officer and parolee views on crime desistance may impede the formation of positive working relationships.

The objective of this study was to determine similarities and differences in the views of parole officers and parolees regarding factors related to crime desistance.

Method

Procedure

Parole offices in six major cities in western Canada were contacted, informed of the study and invited to participate. Questionnaires and interviews were completed by consenting parole officers who were supervising parolees in the community. Parole officers were also asked to inform recent parolees of the study and to invite them to participate by contacting the first author. Parole officers were interviewed at the parole offices; parolees were usually interviewed at a parole office or a halfway house.

Participants

Thirty-four parole officers (41% male; 59% female) agreed to participate. The parole officers had an average of about 5.5 years of experience in community supervision.

The majority of the 61 parolees who participated in the study had been released to the community from a federal correctional institution in western Canada for 30 days or less at the time of the interview. About half of the parolees were on statutory release, about one third were on day parole and about one fifth were on full parole. Most were Caucasian (45.9%), followed by Aboriginal (37.7%), Asian (11.5%) and African Canadians (4.9%). The mean age of the parolees was 34.

Materials

A survey questionnaire was developed to evaluate the views of parole officers and parolees on factors related to crime desistance for high-risk, repeat violent offenders. The participants were asked to think about someone they know or used to know who fit a general description of high risk and who had not reoffended in the community for at least six months. They were then asked to answer the question, "How much do you agree or disagree that each of the following changes stop these people from offending?"

The survey questionnaire consisted of 30 items measured on a 5-point scale ranging from 1 - *Strongly Disagree* to 5 - *Strongly Agree*. Most of the items were based on dynamic criminogenic factors adapted from the Violence Risk Scale (Wong & Gordon, 2006). Other items measuring protective strategies were derived from the theoretical or research literature on crime desistance. Protective strategies were defined in the present study as factors that are perceived to aid in insulating against the learning or maintenance of criminal behaviour.

A brief, semi-structured interview protocol was developed to assess factors that parolees and parole officers believe cause crime desistance in high-risk, violence-prone offenders. The parolees' and parole officers' responses to the open-ended question, "Generally, from your experience, what can best help a high-risk parolee from staying out of trouble?"[4] were content analyzed by coding and tabulating responses using the smallest meaningful unit of analysis. The interviews were recorded using audio-tapes and/or written notes.

Statistical analyses (t-tests) were conducted to determine whether there were differences in parole officer and parolee responses to the survey questionnaire and the interview question. The responses to the open-ended question were grouped into categories to reflect their content. For example, employment and family were grouped under protective strategies.

Results

Survey questionnaire

The survey questionnaire asked participants to rate the extent to which they agreed or disagreed with the 30 items that are reported markers of crime desistance. The large majority of items had a mean (average) score of 4 or above (see Table 1), indicating that, on average, participants agree with the survey items. Increased motivation to change was rated highest overall by both groups, followed by increased emotional control and increased positive work ethic. All but 4 items received the same ratings from both groups of participants. The total mean score of the survey questionnaire was 4.19 [standard deviation (*SD*) = 0.46].

Overall, the results indicated that parole officers and parolees had a high degree of concordance in their ratings, that is, they agreed with each other much more than they disagreed on the questionnaire items. The ratio of the number of items they agreed on to the number of items they disagreed on is about 6:1.

On the items they disagreed on, parole officers were significantly more likely than parolees to rate 'less time spent in high-risk situations,' 'increased participation in organized leisure activities' and 'increased stability of relationship' as important markers for crime desistance. Parolees were significantly more likely than parole officers to rate 'increased respect for family,' 'decreased cognitive distortions' (phrased as "thinking more realistically") and 'increased compliance with supervision' as crime desistance markers.

Table 1

Comparison between Parole Officer and Parolee Ratings on Survey Items

"How much do you agree or disagree that each of the following changes stop these people from offending?"

	Total sample (N = 95) Mean score	Parole officers (n = 34) Mean score	Parolees (n = 61) Mean score
Motivation			
Increased motivation to change	4.52	4.42	4.57
Increased compliance with supervision	4.04	3.73	4.22 *
Criminogenic needs			
Increased emotional control	4.43	4.40	4.43
Increased coping strategies[a]	4.39	4.36	4.40
Decreased substance abuse	4.37	4.64	4.22
Less time spent in high-risk situations	4.36	4.67	4.18 *
Decrease in violent relationships	4.30	4.21	4.34
Decreased impulsivity	4.29	4.06	4.42
Increased insight into violence	4.28	4.15	4.35
Decrease in time spent with criminal peers	4.28	4.49	4.17
Decreased cognitive distortions[b]	4.27	3.88	4.48 *
Decreased criminal attitudes	4.23	4.03	4.33
Decreased interpersonal aggression	4.19	4.00	4.30
Decreased number of criminal peers	4.12	4.15	4.10
Decreased violent lifestyle	4.09	4.12	4.07
Reduction of criminal beliefs	4.09	4.06	4.10
Decreased weapon use	4.00	3.79	4.12
Decreased emotional problems	3.99	3.97	4.00
Protective strategies			
Increased positive work ethic	4.41	4.24	4.50
Increased prosocial attitudes	4.36	4.18	4.45
Increased respect for family	4.34	4.03	4.51 *
Increase in time spent with prosocial peers	4.26	4.24	4.27
Increased prosocial beliefs	4.16	4.21	4.14
Increase in supportive relationships	4.14	4.24	4.09
Increased number of prosocial peers	4.08	4.30	3.95
Increased acceptance of societal values	4.09	4.00	4.14
Increased stability of romantic relationship	3.91	3.94	3.90
Increased participation in leisure activities	3.84	4.12	3.68 *
Increased participation in treatment	3.84	3.97	3.76
Increased stability of relationship	3.83	4.27	3.58 *

Items rated from 1 = strongly disagree to 5 = strongly agree.
*Significant difference between parole officers and parolees.

[a]In the parolee survey, this item was phrased as "Increased ability to handle bad situations."
[b]In the parolee survey, this item was phrased as "Thinking more realistically."

Semi-structured interview

In the semi-structured interview, the most frequent responses for the total sample to the question "Generally, from your experience, what can best help a high-risk parolee stay out of trouble?" were support/encouragement (30.9%), followed by motivation (25.5%) and treatment (18.1%) (see Table 2). Interestingly, treatment was articulated as important for crime desistance by 18.1% of parolees but only 8.8% of the parole officers.

The only domain that was significantly different between parole officers and parolees was criminogenic needs, which received a significantly larger endorsement by parole officers (55.9%) than by parolees (28.3%); responses to all the other domains were not significantly different. Parole officers reported abstaining from substances, employment and honesty significantly more often than parolees to the above question. The only responses parolees reported more often than parole officers were family (15% vs. 5.9%), treatment (23.3% vs. 8.8%), religion/spirituality (8.3% vs. 0%) and 'don't know' (8.3% vs. 2.9%), although the differences were not statistically significant. The lack of statistical significance in some of the comparisons of proportions may be due to the lack of power resulting from the small number of responses used in the analyses.

Table 2

Differences between Parole Officers and Parolees in Response to Semi-Structured Interview Question

"What can best help a high-risk parolee from staying out of trouble?"

	Total sample ($N = 94$) n (%)	Parole officers ($n = 34$) n (%)	Parolees ($n = 60$)[a] n (%)
Motivation	41 (43.6)	19 (55.9)	22 (36.7)
Support/Encouragement	*29 (30.9)*	*13 (38.2)*	*16 (26.7)*
Motivation	*24 (25.5)*	*12 (35.3)*	*12 (20.0)*
Criminogenic needs	36 (38.3)	19 (55.9)	17 (28.3) *
Insight/Recognizing triggers	*16 (17.0)*	*7 (20.6)*	*9 (15.0)*
Abstaining from substances	*12 (12.8)*	*10 (29.4)*	*2 (3.3)* *
Avoiding criminal peers	*12 (12.8)*	*7 (20.6)*	*5 (8.3)*
Protective strategies	31 (33.0)	16 (47.1)	15 (25.0)
Employment	*16 (17.0)*	*11 (32.4)*	*5 (8.3)* *
Family	*11 (11.7)*	*2 (5.9)*	*9 (15.0)*
Community support	*13 (13.8)*	*7 (20.6)*	*6 (10.0)*
Treatment programs	17 (18.1)	3 (8.8)	14 (23.3)
Other	21 (22.3)	12 (35.3)	9 (15.0)
Honesty	*8 (8.5)*	*6 (17.6)*	*2 (3.3)* *
Religion/Spirituality	*5 (5.3)*	*0 (0)*	*5 (8.3)*
Keeping busy	*6 (6.4)*	*3 (8.8)*	*3 (5.0)*
Do not know	6 (6.4)	1 (2.9)	5 (8.3)

[a] One respondent did not complete this question.
* Significant difference between the responses of parole officers and parolees.

Note: Participants may have mentioned more than one response to the question. If parolees mentioned at least one of the italicized items, it was tabulated for the non-italicized/bolded item above it (e.g., if participants reported motivation, this means their response was motivation and/or support/encouragement).

Discussion

The questionnaire survey results suggest that parole officers and parolees generally have similar views regarding what it takes to be successful in the community and desist from crime. Both groups endorsed motivation, reduction of criminogenic needs and protective strategies very highly (most ratings >4) suggesting that, overall, parole officers and parolees tended to see eye to eye regarding what could contribute to crime desistance. Even those in the present sample who were persistent offenders with extensive criminal careers recognized the importance of criminogenic and protective factors in crime desistance. Talking the talk does not seem to be the issue; many of them likely stumbled in the past while walking the walk.

The interview data are consistent with the survey data; there are many areas of similarity between the two groups. One area that was highly endorsed by both groups was the importance of motivation in crime desistance. Parole officers and parolees could use this area of consensus as a common starting point towards building a functional working relationship. Most of the responses to the open-ended question – for example, motivation/support, employment and abstaining from substances – were consistent with similar studies in the literature (Brown, 2004a; Brown, 2004b; Rex, 1999; Seiter, 2002; Farrall, 2002). One area that parole officers tended to mention more than parolees was criminogenic need, in particular, abstaining from substances.

There tended to be more areas of difference and larger differences[5] between the two groups in the interview data than in the questionnaire data. The observed differences could be attributed to the data collection methodology. That is, in contrast with the questionnaire, in the open-ended interviews, participants were given greater freedom to prioritize the expression of their views and to discuss any number of issues they wished.

The results suggest that parolees focused on the more internal and experiential aspects of crime desistance such as motivation rather than on the more external aspects such as employment (positive work ethic), which was among the highest ranking items in the survey data but was very minimally mentioned in the interview data by parolees. Parolees appeared to recognize the importance of both criminogenic and protective factors in crime desistance as evidenced in the questionnaire data. Judging from the interview data, however, they considered internal factors such as motivation, support and encouragement to be of higher priority than external factors such as peer group, employment and community support. Parole officers' views tended to be more balanced.

Overall, parole officers and parolees agreed more than they disagreed about factors involved in crime desistance; however, there were differences. Parole officers tended to focus more than parolees on offending-related behaviours (e.g., substance abuse and time spent in high-risk situations), and to some extent on protective strategies such as employment. Disagreements between the supervisee and supervisor have been found to have negative effects on working alliances (Norrie, Eggleston & Ringer, 2003). Parole officers and case managers can use the many areas of agreement and commonality with parolees to build functional and strong working alliances, on the basis of which they could work with those they supervise to resolve potential areas of perceived disagreement. These areas of disagreement may be no more than subjective rankings of perceived needs, an important responsivity factor, rather than fundamental differences in the philosophy of crime desistance.

In sum, for factors related to crime desistance, parole officers and parolees were quite similar in their views, providing further support for the use of current approaches in parole supervision (Bonta & Cormier, 1999). Notwithstanding this, the differences indicate that parole officers should also pay attention to parolees' personal and subjective views of what they consider to be important in crime desistance, an important responsivity factor. ■

[1] Manuscript based on findings from Parhar, K. (2004). *The development of the positive self change theory of crime desistance: Perceptions of parole officers and parolees.* Unpublished master's thesis, University of Saskatchewan, Saskatoon, Saskatchewan, Canada. Advisor: Stephen C.P. Wong.

[2] University of Saskatchewan, Department of Psychology, Arts Building, 9 Campus Drive, Saskatoon, Saskatchewan, Canada S7N 5A5; e-mail: karen.parhar@usask.ca.

[3] University of Saskatchewan and Regional Psychiatric Centre, Correctional Service of Canada, P.O. Box 9243, 2520 Central Avenue, Saskatoon, Saskatchewan, Canada S7K 3X5; e-mail: wongst@csc-scc.gc.ca.

[4] The question was modified slightly to facilitate the parolees' comprehension of the question.

[5] Some differences between the two groups are quite large in magnitude but not statistically significant, probably because of the lack of power due to small sample sizes.

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Understanding failure to comply convictions with young offenders: A snapshot of one Canadian courthouse[1]

Jessica E. Pulis[2]
Department of Sociology & Anthropology, University of Waterloo

Under the Young Offenders Act, *and now the* Youth Criminal Justice Act, *failure to comply with a disposition is an offence, but we know little about it.*

From easily available youth court statistics, we do know that the rate of bringing youths in to court for this offence and imposing custody for it has increased slightly over the years, resulting in 13% of the cases in youth court and 23% of the cases in custody (Doob & Sprott, 2004). We also know that most failure to comply (FTC) cases brought to youth court only have single or multiple charges of FTC but no other criminal charges (Sprott, 2004). And we know that, although administrative offences like FTC are victimless offences, they are actually more likely to result in a custodial sentence than any other summary or hybrid offence except sexual assault (Carrington & Moyer, 1995).

Given that the FTC "offence" often involves breaching a condition of probation (e.g., curfew, non-association order, reporting to youth worker) as opposed to committing a substantive criminal offence, sanctioning with a custodial sentence may appear overly punitive.

Beyond this, however, we know very little about FTC offences. We do not know, for example, what unfulfilled probation conditions typically result in FTC charges/convictions.

Given the high use of custody and the increasing rates of bringing these types of cases into youth court, it is worthwhile to take a closer look at the types of breached conditions that result in FTC convictions. Using a sample of FTC cases from Ontario, this study explores the types of probation conditions young people were convicted of breaching, leading to the FTC conviction. The three most commonly breached conditions will be investigated in detail in an attempt to understand what factors appear to be related to the FTC conviction.

Method

The sample of cases for this study was drawn using random sampling with replacement[3] from a courthouse in southern Ontario, using cases disposed of in the year 2001 under the *Young Offenders Act*. Young offenders' files were examined by way of a content analysis. Only those offenders who were convicted of FTC were included in this study. In all, 69 young offenders' files were used in the analysis of the data. The cases in this sample were examined for the following information: gender, age, presence of a co-accused, probation conditions violated, other charges and current disposition.[4]

FTC offences can include failing to comply with such conditions as a community service order, an order of restitution or, more frequently, an order of probation. Not surprisingly, all FTC convictions in this sample were for breaches of probation. In this context, it is important to note that all probation orders contain two mandatory conditions: 1) "keep the peace and be of good behaviour;" and 2) "appear in court when deemed necessary by the court." All offenders convicted of an offence and given a disposition of probation must comply with these two conditions. A judge will add any other conditions she or he feels necessary to promote the goals and principles outlined in the youth justice legislation (e.g., protection of the public, accountability, rehabilitation).

Description of failure to comply cases

The sample of selected FTC cases in this study included approximately equal proportions of girls and boys: 46% girls (32 cases) and 54% boys (37 cases). This is somewhat different from what is found nationally, where boys constitute the majority of FTC cases (Sprott, 2004). The average age of all offenders at the time the offence was committed was 15 years of age. About 22% were 14 years of age or younger, 27% were 15 years old, 26% were 16 years old and 16% were 17 years old.[5]

All cases in this sample were convicted of FTC but most (60%) were also charged and convicted of a second offence. Once again, this finding is in contrast to what is found when looking at Canada overall, where only 10% of cases had a conviction for a criminal offence in addition to the FTC conviction (Sprott, 2004). Thus, in comparison to Canada overall, cases from this southern Ontario court appeared to involve more girls and more convictions for offences in addition to the FTC conviction.

Of the cases that resulted in conviction on charges other than the FTC charge, approximately half involved conviction for a property offence (predominantly theft under $5,000), a third were convicted of a violent offence (mainly minor assaults) and 18% were convicted of an "other" offence (largely breaches of recognizance).

The most commonly breached probation conditions were: "keep the peace and be of good behaviour"... "obey the rules and discipline of the home or approved facility" ... and "reside at an address approved by a youth worker"....

About two thirds of cases received custody as their new disposition, while the remaining third received a non-custodial sanction.[6] Those cases that involved a violent offence conviction in addition to the FTC conviction were more likely to receive a custodial sentence than those involving property offences or "other" offences combined.

Understanding failed conditions of probation

The most commonly breached probation conditions were: "keep the peace and be of good behaviour" (52%); "obey the rules and discipline of the home or approved facility" (13%); and "reside at an address approved by a youth worker" (12%). The following discussion explores factors related to these most commonly breached conditions.

"Keep the peace and be of good behaviour"

The condition to "keep the peace and be of good behaviour" is of particular importance in this analysis as it is a mandatory condition that all young offenders must comply with when sentenced to probation. One can imagine the range this condition could have in monitoring, controlling or restricting a young offender. This condition could mean many things to judges, police officers or probation officers. Further, there is no clear definition of what this condition actually entails, and not complying with this condition could mean an offender was caught committing a number of different offences.

Analysis of the data suggests that convicting a youth with FTC for breaching this condition is systematically related to the number of other offences committed and the type of offences committed. The vast majority of young offenders who were convicted of another offence had breached this condition. More specifically, 83% of young offenders convicted of a second offence were also convicted of failing to comply with this condition, compared to 7% of offenders who were not convicted of anything else except FTC (Chi-Square, corrected for continuity=35.317, df=1, $p = < .001$).

Secondly, the nature of the second conviction was significantly related to this failed condition. All of the offenders convicted of violent offences and 95% of offenders convicted of property offences were also convicted of breaching this condition to keep the peace, compared to 43% of offenders convicted of "other" offences (Chi-Square=15.186, df1=1, $p = < .001$).

It appears that the more serious the accompanying substantive offence, the more likely an offender will be convicted of breaching this condition. If a young offender is convicted of a violent offence, a youth court judge may be reluctant to dismiss the other charge because this was a violent offence. More so, youth court judges may also be reluctant to dismiss the FTC charge as a means of making the punishment more severe for the more serious crimes. This condition may need a clear and concise definition so that judges, lawyers, police officers, probation officers and, most importantly, young offenders understand the nature of this condition.

"Reside at an address approved by a youth worker"

Gender was significantly related to convictions for breaching this condition. While only 3% of males were convicted of breaching this condition, 22% of females were convicted of breaching it (Chi-Square, corrected for continuity=4.425, df=1, $p = .035$). Interestingly, if an offender was *not* convicted of a second offence, she or he was more likely to be charged with breaching this residency condition. It could be that a breach of this condition is seen as serious enough to warrant official police and court responses.

It is unclear why girls were more likely than boys to be convicted of breaching this specific condition. It may be that girls are more likely to be given this condition in the first place and, therefore, would be the ones more susceptible to being convicted of breaching it. That is, youth court judges may impose this condition of probation more often with girls because girls are more likely to run away from home or an approved place of residence (Corrado, Odgers & Cohen, 2000). This reasoning can be linked to the finding that young women are more likely to be the victims of abuse in the home, and as a result run

away from the home to escape the abuse (Corrado, Odgers & Cohen, 2000).

Perhaps if girls are more often placed into group homes or foster care, they may be monitored more often than boys who live at home and are under the care of their parents. Police and group home facility workers would possibly report a breach of this condition more often than a parent or guardian would. It is possible that the police are more likely to officially respond to girls who breach this condition, perhaps seeing them in a paternalistic way, needing guidance and protection. Unfortunately, the data do not permit for an analysis of police discretion.

"Obey rules and discipline of the home or approved facility"

The age of the offender and whether or not the offender was convicted of a second offence were both significantly related to breaching this condition.

Younger offenders were more likely than older youths to be convicted of this offence. Roughly one third of young offenders who were 14 years of age or younger had breached this condition, compared to 11% of 15-year-olds, 6% of 16-year-olds and 0% of 17-year-olds (Chi-Square=8.271, df=3, p = .041).

Secondly, whether or not the offender was convicted of a second offence was significantly (though inversely) related to this condition. One quarter of offenders who were *not* convicted of another offence were convicted of breaching this condition, compared to only 5% of offenders who were convicted of another offence (Chi-Square, corrected for continuity=4.298, df=1, p = .038).

The relationship between age and breaching this condition to obey is unclear. One possible explanation focuses on the idea that younger offenders more often live in group homes, while older youth may live on their own. As a means of reinforcing the rules and regulations of the group home, the facility may call the police when a youth is misbehaving. Another possible explanation focuses on the level of policing. Specifically, the police may be more likely to officially respond to younger children. Police may perceive younger youth who are disobedient as more serious, requiring an official response. It could be that the response these officers have to younger children is also indicative of paternalistic perceptions of adolescence and youth. A final possible reason for this relationship focuses around the judicial use of this condition. It may be that youth court judges feel compelled to set out guidelines for younger youth to follow, similar to the police officers who bring in these offenders. Thus, it may be that younger youth are more likely than older youth to be given this condition and therefore are more susceptible to breaching it.

. . . the "keep the peace" condition is an ambiguous term that could encompass an infinite number of actions or behaviours. Clear and concise definitions may be required so that all judicial agents (judges, lawyers, probation officers and police officers) and, most importantly, young offenders understand the nature of this condition.

Perhaps youth courts should re-evaluate conditions that resemble parenting interventions, because the reality is that these conditions appear to be difficult for youth to comply with and they subsequently result in the costly sanction of custody.

If an offender was *not* convicted of a second offence, she or he was more likely to be convicted of breaching this condition to obey. Again, this may be linked to initial police contact and the perception that this condition is sufficiently serious, on its own, to warrant official intervention. If the police receive a call from parents or facility workers complaining of a young offender's behaviour, the police can then charge this person with FTC. Therefore, there is no second offence committed, just the initial breach leading to the FTC conviction. However, the data did not permit for an investigation into police behaviour that would allow for a greater understanding of these relationships.

Conclusions and limitations

One of the most interesting findings to emerge from this investigation is that it appears the conditions of probation young people are charged and convicted of breaching are vague and very minor in nature. As previously discussed, the "keep the peace" condition is an ambiguous term that could encompass an infinite number of actions or behaviours. Clear and concise definitions may be required so that all judicial agents (judges, lawyers, probation officers and police officers) and, most importantly, young offenders understand the nature of this condition.

The other conditions that were most often breached – reside at an approved home or facility

and obey the rules and discipline of the home or facility – seem to be more paternalistic in nature. While these conditions appear to have the safety and well being of the young offender in mind, the courts are then imposing sentences of custody on youth who run away or disobey. It appears that young offenders pay a very high price for failing to comply with conditions that seem very minor. Perhaps youth courts should re-evaluate conditions that resemble parenting interventions, because the reality is that these conditions appear to be difficult for youth to comply with and they subsequently result in the costly sanction of custody.

There are likely many other factors both legal (e.g., previous record) and extralegal (e.g., police discretion) that could play an important role in determining the significance of these relationships. An investigation into judges' sentencing practices, police discretion and the role officers play in charging a young offender with FTC would contribute to a more comprehensive understanding of this offence. Unfortunately, due to the limited available data and small sample size, these relationships could not be explored in greater detail in this study.

Perhaps this is where extrajudicial measures, like police warnings or cautions, could play a key role in reducing the number of cases brought to court and custody for failing to comply. Under the *Youth Criminal Justice Act*, police officers are to screen all cases they come into contact with and on many occasions are encouraged to sanction the young person without sending them to court. It is not clear whether the police use, or would use, extrajudicial measures for these types of cases. This requires further investigation.

Only more detailed research will allow for a greater understanding of the use of FTC under the *Youth Criminal Justice Act*. While this study was only a snapshot of FTC, it exemplifies the importance of understanding the judicial use of this sanction and the need to follow these cases through the youth justice system in order to fully comprehend why and when FTC is used and why custody is overwhelmingly used with young offenders who are convicted of FTC in Canada. ■

[1] This article is based on the following M.A. thesis: Pulis, J. (2003). *A critical analysis of probation for young offenders in Canada*. Unpublished Masters thesis, University of Guelph, Guelph, Ontario, Canada. Supervisor: Jane B. Sprott. The preparation of this paper was supported, in part, by a Social Sciences and Humanities Research Council of Canada grant held by J.B. Sprott. The author gratefully acknowledges J.B. Sprott and P.J. Carrington for their continued support and valuable comments.

[2] University of Waterloo, Department of Sociology, 200 University Ave. West, Waterloo, Ontario, Canada N2L 3G1; e-mail: jepulis@artsmail.uwaterloo.ca.

[3] For a detailed description of the sampling procedures used, refer to Pulis, J. (2003). *A critical analysis of probation for young offenders in Canada*. Unpublished Masters thesis, University of Guelph, Guelph, Ontario, Canada.

[4] Previous record information could not be obtained from the young offenders' files included in this analysis. For a discussion of the significance of criminal history on current disposition, refer to Matarazzo, A., Carrington, P.J., & Hiscott, D.R. (2002). The effect of prior youth court dispositions on current disposition: An application of societal-reaction theory. *Journal of Quantitative Criminology, 17*, 169-200.

[5] Information on the age of the offender was not available in six cases.

[6] Non-custodial dispositions include: probation; probation and prohibition; probation, restitution and community service order (CSO); probation, prohibition and CSO; probation and CSO.

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Considering a counter-reformation in the psychology of criminal conduct for women: Converging evidence, confidence intervals and consultation[1]

M.A. Law[2]
Department of Psychology, Carleton University

When Martinson erroneously proclaimed "nothing works," he provoked a series of unfortunate events in North American corrections as punitive policies decimating rehabilitative efforts became mainstream (see Andrews & Bonta, 2003; Martinson, 1974). Consequently, the past 30 years has seen the field of the psychology of criminal conduct (PCC) blossom in an effort to show what things do *work. PCC has been based on empirical evidence showing it is possible to classify offenders, predict their behaviour and identify effective treatment programs for them (Andrews, 1982; Andrews & Bonta, 1998).*

A new question is now on the horizon: Is PCC equally applicable to female offenders? The emerging evidence suggests it is (Blanchette & Brown, 2006; Law, 2004; Motiuk & Blanchette, 2000; Rettinger, 1998). It also may be time, however, to seriously question whether the application of PCC with women can or should develop in a lagging but parallel manner to that done with male offenders (Andrews & Wormith, 1989; Bonta, 1995; Cullen, 1995; Dowden & Andrews, 1999; Gendreau & Ross, 1979; Motiuk, Bonta & Andrews, 1986).

Moving forward

The current political climate is demanding increased research on female offenders, particularly on issues surrounding violent behaviours (Auditor General's Report, 2003; Canadian Human Rights Commission, 2005; Report from Correctional Investigator, 2006). Unfortunately, researchers and arm-chair critics alike are responding with an unfocused cacophony of publications (Blanchette, 2005; Bloom, Owen & Covington, 2004; Hannah-Moffat, 2004; Hardyman & Van Voorhis, 2004). There is no continuity in the research topics, no unifying theory and no direction researchers agree upon to build an evidence-base involving women in conflict with the law (Bloom, 2003; Hannah-Moffat & Shaw, 2000). It may be time to begin the messy business of proposing *practical* steps that may be helpful when exploring PCC with women.

1. Converging evidence: Look for it!

There is evidence that even in the current arena of quantitative research on women offenders, where little has been done in terms of well-designed empirical studies, there are areas of convergence between polarized theoretical camps.

A recent meta-analysis studying predictors of recidivism and institutional misconduct with women (Law, Sullivan & Goggin, 2006) identified substantial overlap between the two leading theories used to explain female criminal conduct: social learning theory and feminist theory. While many predictors are claimed only by social learning theory (e.g., past criminal behaviour and attitudes) or only by feminist theory (e.g., victimization and mental health), many predictors are considered foundational in both perspectives, such as education, employment, associates and family history. The importance of some of these constructs in predicting general and violent recidivism was confirmed. For example, education [r=.27, 95% confidence interval (*CI*) = .21, .33] and employment (r=.13, 95% *CI*=.07, .19) predicted general recidivism. The convergence of these two theoretical camps that often claim to be diametrically opposed to each other is noteworthy.

2. Confidence intervals: Don't be afraid!

Another avenue to potentially deepen our understanding of women's criminal conduct is by examining confidence intervals and not just p-values in our quantitative work.

Confidence intervals have begun to garner attention in forensic psychological research, yet despite the calls by important organizations such as the American Psychological Association (Finch, Thomason & Cumming, 2002) and peer-review psychology journals such as the *Journal of Consulting and Clinical Psychology* (Fidler et al., 2005), researchers have been hesitant to fully embrace confidence intervals.

The ability to automatically generate confidence intervals using statistical software has led to

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researchers reporting but not understanding them, and to readers glancing at but generally ignoring them (Fidler, Thomason, Cumming, Finch & Leeman, 2004). One possible reason for this is a poor understanding of confidence intervals and how they can enhance the reporting and interpretation of results (Belia, Fidler, Williams & Cumming, 2005; Cumming & Finch, 2005).

Although both *p*-values and confidence intervals provide information about the statistical significance of an estimate – for example, how strong the relationship is between a variable like age and an outcome like serious institutional misconduct – confidence intervals have the added advantage of providing information on how certain we are that this is the correct value for the estimate. In criminal psychology, this point estimate is usually the Pearson correlation coefficient *r*. Confidence intervals provide an intuitive and quick glimpse at the variability associated with an estimate, clearly pointing out the likely lower and upper limits of the point estimate, i.e., the range within which one can be certain the *true value* of the correlation lies. If the value, *r*=0, does not lie within the range of a 95% confidence interval, the result is statistically significant at $p < .05$.

Practical steps to interpreting and understanding 95% Confidence Intervals for correlation coefficients

1) Look to see if 0 (i.e., a Pearson correlation coefficient indicating no association between two variables) is between the lower and upper limit of the 95% confidence interval.
    - If 0 is not within the two limits of a 95% confidence interval, then the correlation is statistically significant at $p < .05$.
    - If 0 is within the two limits of a 95% confidence interval, then it is not possible to say with certainty that the value of the correlation is not 0 (i.e., that there is no association between the two variables) and the correlation is not statistically significant at $p < .05$.
2) Determine the width of the confidence interval by calculating the difference between the lower and upper confidence limits. (A wide confidence interval often reflects a diverse population or a small sample size).
    - If the width of the interval is greater than .1, then there is excess variability associated with the correlation and it is unreliable (personal communication, Paul Gendreau).
    - If the width of the interval is .1 or less, the variability associated with estimating the correlation is acceptable.
3) Examine the upper and lower limits of the confidence interval to identify the minimum and maximum values that the correlation could be likely to take on. Since we know that the point estimate is only an estimate and not the true correlation, this gives the possible range of values that the true correlation could take on.

For example. . .

In a recent study (Law, 2004), data was collected on 640 federally sentenced women in the community examining seven criminogenic need domains from the Community Intervention Scale (CIS), formerly the Community Risk Needs Management Scale (CRNMS). These need domains are: associates, attitudes, community functioning, employment, marital/family, personal/emotional and substance abuse. Measures of community adjustment were re-offences coded from Canadian Police Information Center (CPIC) files providing official recidivism data. The analysis and discussion to follow is also relevant to other small subpopulations such as aboriginal, violent and sex offenders.

Analysis

The correlation between type of re-offence and the subscale score on the CIS for each criminogenic need domain was calculated, and *p*-values were reported for each correlation. In addition, 95% confidence intervals were reported for each correlation. An alpha level of 0.05 was considered statistically significant. An estimate was considered stable if the width of the confidence interval was less than or equal to .1. Analyses were done using SAS 9.1.3 (SAS Institute Inc., Cary, North Carolina).

Results

Table 1

Correlation between Domains of the CIS and Any Type of Re-offence by Female Offenders after Release (*N*=640)

CIS domain	Pearson's correlation coefficient (*r*)	*p*-value	Statistically significant ($p < 0.05$)	95% *CI*	Statistically significant (95% *CI* includes 0)	Width of 95% *CI*	Acceptable variability (width of *CI* <= 0.1)
Employment	0.26	< 0.0001	YES	0.18, 0.33	YES	0.15	NO
Family	0.13	0.001	YES	0.05, 0.20	YES	0.15	NO
Associates	0.19	< 0.001	YES	0.12, 0.27	YES	0.15	NO
Substance abuse	0.14	0.0005	YES	0.06, 0.21	YES	0.15	NO
Community	0.17	< 0.0001	YES	0.10, 0.25	YES	0.15	NO
Personal/Emotional	0.14	0.0006	YES	0.06, 0.21	YES	0.15	NO
Attitudes	0.16	< 0.0001	YES	0.09, 0.24	YES	0.15	NO

Discussion

The correlation coefficients observed between recidivism and criminogenic needs with female offenders were comparable to similar research on male offenders (Motiuk & Brown, 1997). Examining the correlation coefficient (column 2) across CIS domains, employment emerges as the most important predictor for any type of re-offence (r=.26, *CI* .18 to .33). In a field where correlations greater than .1 are noteworthy, coupled with the fact that women are a heterogeneous population, these are correlations to cause excitement. This in itself raises concern, especially when one considers that the data in Table 1 represents not simply a sample drawn from the population but was in fact the entire targeted population at the time of the study.

. . . a statistically significant result . . . of small magnitude may have little clinical or practical significance for women offenders in terms of policy or programming.

Any interpretation of quantitative data should consider the magnitude (r), direction (+/-) and statistical significance (p-value) of the result. Nonetheless, many researchers seem to emphasize only the statistical significance (p-value) of results (Finch, Cumming & Thomason, 2001). Thus, a statistically significant result (p-value) of small magnitude (r) may have little clinical or practical significance for women offenders in terms of policy or programming.

It is time to ask difficult self-critical questions like: Are we *asking* the right question? Are we asking it in the right manner? Why is it such a small relationship? What may be missing?

While many of the correlations between re-offence and criminogenic needs were statistically significant at $p < .05$, examination of the 95% confidence intervals reveals that there is substantial variability associated with these correlations. Looking at Table 1, none of the confidence intervals are narrower than .1, the present standard in criminal justice literature (personal communication, Paul Gendreau). This is disconcerting. One might then pose the question: Is .1 an appropriate standard to use when conducting research on women offenders? While this standard might be appropriate when conducting research on male offenders, who are a relatively large and homogeneous population, it may not be appropriate for the small and diverse population of women offenders.

3. Consult! Consult! Consult!

Rather than pursuing conventional deconstructionist thinking that would cease efforts to predict women offender behaviour, this may be a muted call to operationalize established constructs from PCC in a truly gender-informed manner. An example of this would be employment domains that reflect women's histories as wives, single-mothers and/or having parenting responsibilities (Blanchette & Brown, 2006). As the constructs become more "informed"

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and "specific," the quality of quantitative relationships (*r*) should increase.

It may be time to return to grassroots, exploratory, qualitative research in order to appropriately inform and direct future quantitative research, rather than blindly mapping on to the progression of PCC in recent years by researchers with male populations (see Andrews & Bonta, 2003). This can be accomplished by: 1) engaging in meaningful consultation to deconstruct women's experiences along pathways into, through and out of the penal system; and 2) considering environmental factors intertwined in these correlations, thereby responding to feminist critics' unceasing calls for the contextualization of women's experiences (Bloom, 2003; Hannah-Moffat, 2000).

There is a high probability that such a return to qualitative research would continue to uncover compatibilities and converging validities between social learning theory and feminist theory on pertinent factors (e.g., relationships/associates). This would provide a blended and stronger theoretical reorientation from the heated debate that has evolved between feminist and social learning perspectives.

It is time to halt the polarization of theorizing on female offenders . . . and to improve dialogue as more converging evidence becomes apparent.

Conclusion

While confidence intervals clearly add value to the interpretation of data on women offenders by providing information on the variability of the estimates, careful scrutiny of these data reveal notable latent issues. It is time to consider not just the statistical significance of results . . . and to start scrutinizing more closely the magnitude of correlations.

It is also time to begin merging historically incompatible lexicons, to recognize, for example, that "contextualization" for feminist theorists (Chesney-Lind, 2001) may be congruent with the "community reinforcement" component of the Personal, Interpersonal, Community Reinforcement (PIC-R) theory (Andrews, 1982). It is time to halt the polarization of theorizing on female offenders . . . and to improve dialogue as more converging evidence becomes apparent. It is time to stop assuming that risk/needs constructs developed with male offenders have identical underlying structures for female offenders . . . and return to exploratory qualitative research in the hopes of informing the operationalization of these constructs for future quantitative research.

Remember that statistical significance is not clinical significance.

The game plan

- Embrace the transition from null hypothesis testing (*p*-values) to reporting of confidence intervals. Studies conducted in small offender sub-populations – e.g., violent offenders, female offenders, sex offenders – should always report confidence intervals. This will allow readers to easily see the variability associated with these estimates and potential maximum values that correlations may take on.
- Recognize that variability may be greater in small heterogeneous sub-populations such as women offenders, aboriginals, violent offenders and sex offenders. Obtaining a confidence interval width of .1 may be unrealistic at this stage. Bands of .15 appear to be a more realistic standard to set, at least for women offenders.
- Remember that statistical significance is not clinical significance. Concrete efforts need to be made to increase the magnitude of correlations being obtained with women offenders by pursuing gender-informed constructs, exploring situational variables, and validating the applied nature of these relationships.
- Assume nothing: return to full consultation with the women being served in the correctional system with the vision of conjoining qualitative and quantitative methods. ■

[1] This article is partially based on the work of Law, M.A. (2004). *A longitudinal follow-up of federally sentenced women in the community: Assessing the predictive validity of the dynamic characteristics of the Community Intervention Scale.* Unpublished doctoral dissertation. Ottawa, ON: Carleton University. Advisor: D.A. Andrews.

[2] Veritas Research Institute, 2746 Rothesay Road, Rothesay N.B., E2H 2L2, e-mail: moiralaw@nbnet.nb.ca.

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Gender in parole decisions[1]

Renée Gobeil[2]
Department of Psychology, Carleton University

Though parole release decisions have important implications, to date there has been little research on the factors influencing them; a recent study, however, aimed to address this scarcity.

Using offender case vignettes modeled on cases routinely encountered by parole board members, it was found that, in a sample of 31 parole board members from Canada and New Zealand, day parole grant rates were significantly higher for women offenders than for male offenders. These findings expand on those described elsewhere in that gender differences were found to be maintained when both level of risk and perceived likelihood of remaining crime-free until warrant (sentence) expiry were controlled, demonstrating that gender has a unique relationship with parole decision not explained by these factors. Implications are discussed in terms of risk assessment, parole board decision-making and parole board member training.

Introduction

Release decisions made by parole boards have extensive and far-reaching consequences. Not only do parole board members have to consider the merits of the applications before them, but they must also weigh the societal costs of any erroneous release and the monetary and ethical burden of any offender remaining incarcerated unnecessarily. Moreover, most parole boards' guiding principles indicate that decisions must be made as liberally as possible, taking into account public safety and the estimated probability of recidivism. These multiple issues contribute to the difficulty of parole board members' tasks. Despite the unmistakable significance of parole board release decisions, little research has been focused on the area of parole decision making.

. . . the objective of this study was to examine whether gender continued to influence day parole grant decisions after controlling for risk . . . and for perceived likelihood of successful warrant completion . . . .

Statistics do show, however, that gender is linked to parole. Specifically, as compared to male offenders, women offenders typically serve smaller portions of their sentences before being released on various types of parole (Public Safety and Emergency Preparedness Canada, 2006). Women also typically have better parole outcomes than male offenders – that is, they return to custody (either due to revocation or to reoffence) less frequently (Grant & Gillis, 1999). This is not surprising, considering that women tend to be considered relatively low-risk offenders. They generally commit fewer offences, and their offences are often of less severity than those committed by male offenders (National Parole Board of Canada, 2006a).

To date, however, no research has addressed how these three factors – level of risk, likelihood of successful warrant completion, and gender – interact to influence parole release decisions. As such, the objective of this study was to examine whether gender continued to influence day parole grant decisions after controlling for risk (using methodological design features) and for perceived likelihood of successful warrant completion (using statistical procedures).

Methodology

In order to ensure an adequate number of participants, parole board members from both the National Parole Board of Canada and the New Zealand Parole Board were recruited. These boards were chosen because they were sufficiently similar in terms of guiding principles, population served, risk assessment procedures and decision-making guidelines to be appropriately combined in analyses (Department of Justice Canada, 1992; National Parole Board of Canada, 2006b; New Zealand Parole Board, 2002; New Zealand Department of Justice, 2002).

A total of 31 board members, of whom 22 were from Canada's National Parole Board, participated in the study. Slightly over half of these (58%) were male, and most were between 45 and 64 years of age (74%). Most board members (84%) had professional backgrounds in law, criminal justice, correctional service or human service delivery.

The study was conducted using a secure website. This procedure allowed the board members to participate at a time and location that were convenient for them, and also served to reduce data entry errors. Once they logged in using an individual, randomly assigned username and password, board members were presented with six hypothetical vignettes. For each vignette, the board members were asked both to decide whether to grant or deny day parole and to provide an estimate of the offender's likelihood of successfully remaining crime-free until warrant expiry.

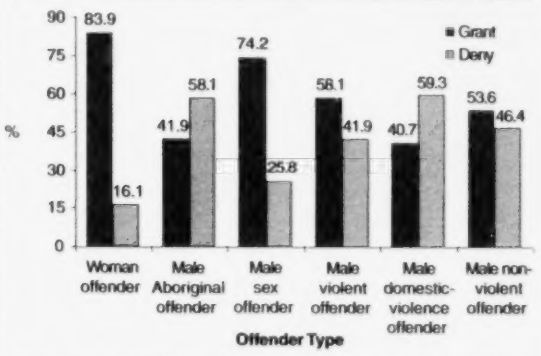
In one vignette, the offender was a woman offender convicted of drug-related offences; for the others, the offenders were male offenders with various convictions, including sexual, violent and non-violent offences. The vignettes were constructed to be similar in length and in content. Notably, in all cases, the offenders were described as representing a moderate risk to reoffend. These statements were supported using estimates from actuarial assessment tools, where appropriate, and a review of static and dynamic risk factors.[3]

Results

Overall, day parole was granted in 59% of cases. Interestingly, there was considerable variability in grant rates; some board members granted parole for all six offender vignettes while others denied in all cases. Statistical tests showed that the differences in grant rate were not related to the parole board affiliation, gender, age, length of professional experience or professional background of respondents.

Figure 1

Day Parole Decisions by Offender Type



Note. The woman offender vignette was significantly more likely than the other offender vignettes to receive a 'grant' decision, $\chi^2(1, N = 179) = 9.44$, $p < .01$.

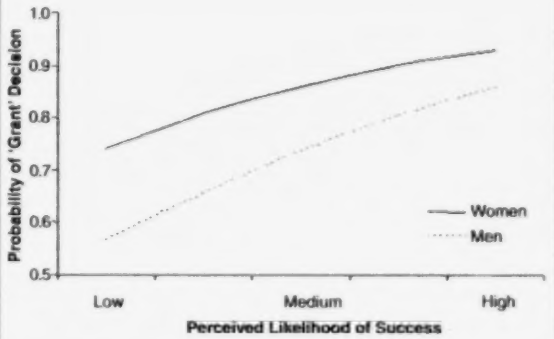
As can be seen in Figure 1, however, grant rates did differ by offender type. Analyses demonstrated that the woman offender vignette was more likely to receive a 'grant' decision than were any of the vignettes with male offender protagonists.[4]

It was then examined whether gender continued to be associated with release decision after controlling for perceived likelihood of successfully remaining crime-free until warrant expiry. Indeed, the results of a series of analyses demonstrated that the relationship between day parole decision and gender was not fully explained by the relationship between parole decision and perceived likelihood of successful warrant completion.

In other words, as is shown in Figure 2, the finding that the woman offender vignette was more likely than the other vignettes to receive a 'grant' decision was present at all levels of perceived likelihood of successful warrant completion. Indeed, the difference between the grant rate for the woman offender vignette and the male offender vignettes was greatest when the perceived likelihood of the offenders' success was lower.

Figure 2

Probability of 'Grant' Decision as a Function of Perceived Likelihood of Success and Gender



Note. A regression model that included gender in addition to perceived likelihood of successful warrant completion was significantly more predictive of day parole decision than one that included only perceived likelihood of success, $\chi^2(1, N = 179) = 9.25$, $p < .01$.

Discussion

The present results demonstrate that this sample of parole board members granted women offenders parole with greater frequency than they did male offenders. Given that the vignettes used in this study all indicated that the offenders represented moderate risk, these findings are consistent with previous research indicating that a designation of a specific

. . . these findings demonstrate that gender has a relationship with parole decision above and beyond that explained by either risk or perceived likelihood of successful warrant completion.

level of risk is interpreted as having a different meaning depending on the gender of the offender to whom it is applied (Hardyman & Van Voorhis, 2004).

Analyses also revealed that women offenders continued to be more likely than male offenders to be granted day parole even when the perceived likelihood of successful warrant completion was statistically controlled.

Together, these findings demonstrate that gender has a relationship with parole decision above and beyond that explained by either risk or perceived likelihood of successful warrant completion.

It is important to note, however, that this study did not attempt to determine whether gender alone explains this additional variance or whether additional factors, unmeasured here, also play a role. Until research addresses this issue, the present conclusions must be interpreted with caution.

Nonetheless, the finding that gender's relationship with parole outcome is not fully explained by risk or by perceived likelihood of successful warrant completion leads to a discussion of several potential implications.

First, such findings lend support to calls for the development of actuarial measures of risk of recidivism which are gender-sensitive, to better anchor decisions for those offenders for whom existing measures cannot appropriately be used.[5]

Secondly, they demonstrate that it may be beneficial for parole boards to formulate more specific definitions of what is meant by risk ratings, and what release decisions would appropriately correspond to such ratings. The development of such definitions, with consideration of gender, culture, mental health and other offender-specific factors, should lead to greater uniformity in parole decisions, regardless of offender characteristics.

Finally, these results underscore the importance of training programs for new parole board members aimed at increasing consistency in decision making.

These preliminary findings suggest that progress in these areas would help ensure that release decisions meet the legislative requirements of accuracy and fairness in release decisions. ■

[1] Manuscript based on findings excerpted from Gobeil, R. (2006). *Factors influencing parole decision making: Demographic characteristics, cognitive style, and offender type.* Unpublished Masters thesis. Ottawa, ON: Carleton University.

[2] Research Branch, Correctional Service of Canada, 340 Laurier Avenue West, Ottawa, Ontario K1A 0P9; e-mail: gobeilre@csc-scc.gc.ca.

[3] As a check of the generalizability of the results of the study, board members were asked the degree to which the vignettes were representative of those they encountered in the course of their work; responses demonstrated that the vignettes were satisfactorily representative.

[4] It is noteworthy that this distinction was evident both when all six offender types were considered and when only two categories of offenders (i.e., men and women) were considered.

[5] See, for example, Hannah-Moffat, K., & Shaw, M. (2001). *Taking risks: Incorporating gender and culture into the classification and assessment of federally sentenced women in Canada.* Ottawa, ON: Policy Research, Status of Women Canada.

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Traditional and new perspectives for understanding and researching gender and aggression[1]

Kelly Taylor[2]
Department of Psychology, University of Ottawa

This article will introduce literature related to the study and understanding of gender differences in the manifestation of aggression among adults, while discussing how and why this is critical within a correctional environment.

Evidence suggests that aggression manifests itself differently in men and women and that existing instruments and methodological approaches fail to capture the true complexity of aggression or the varying manifestations of aggression in men and women. It is argued that although the measurement of physical or verbal aggression is adequately captured by existing instruments, more covert forms of aggression, such as relational aggression, can be better understood by a gender-informed approach. The incorporation and consideration of such a framework may assist in advancing one's understanding of the factors that affect aggressive behaviour in men and women.

Associations between anger and aggression, aggression and violence and, in turn, the sequence of aggression, violence and crime are evident. Furthermore, Correctional Service Canada's Mental Health Strategy, Intensive Intervention Strategy for women and a variety of specialized treatment/programming approaches underline the organization's understanding that managing emotions and aggression among offenders is important.

Traditional perspectives

Predominant theories of aggression include the frustration-aggression hypothesis (Dollard, Doob, Miller, Mowrer & Sears, 1939) and the AHA! Syndrome (Anger, Hostility, Aggression) (Spielberger, Johnson, Russell, Crane, Jacobs & Worden, 1985). These two theories have dominated past research on aggression, including the way we view and measure this construct. In short, they suggest that aggression is directly related to frustration, anger and hostility, characteristics described as precursors to aggression.

The causes of aggression are complex, however, including biological, emotional, social and cognitive factors. While the interconnectedness of these antecedents to aggressive behaviour is clear, predominant theories and ensuing methodology fail to consider aggression's complexity.

Recent research examined the major meta-analyses conducted on psychological gender differences, including those examining gender differences in aggression (Hyde, 2005). Findings revealed strong evidence for the gender similarities hypothesis[3]; that is, 78% of effect sizes[4] related to gender differences are small or close to zero. Hyde (2005) maintained, however, that evidence suggesting that there are only small gender differences in aggression is typically refuted when researchers consider the *type* of aggression being examined.

The missing piece in meta-analytic findings to date relates to how traditional views of aggression have led researchers to ignore non-traditional forms of aggressive behaviour which are more difficult to observe and measure – specifically, indirect and covert forms of aggression. Also of interest are variables identified within these meta-analytic findings that have the potential to act as mediator variables in the study of gender differences in aggression.

Indirect forms of aggression

Developmental psychologists[5] suggest that traditional measurement instruments for aggression are most effective in measuring direct aggression. They may therefore underestimate or provide inaccurate findings about the level of aggression among women, for whom direct aggression may not be the preferred mode of expression.

Subtle, social, relational, psychological and a variety of additional indirect forms of aggression allow aggression to take place in a very covert as opposed to overt manner. It is this covertness that makes indirect forms of aggression elusive and difficult to measure in a valid and reliable way.

Crick and Grotpeter (1995) defined relational aggression as behaviour that "... harms others through damage to their peer relationships or to the threat of such damage" (p. 313). Damage to a relationship generally occurs through manipulation or control, threatening withdrawal of acceptance or friendship, or using social exclusion or rumour spreading as forms of retaliation.

Most research examining relational aggression has been conducted with children and adolescents. Much of the research with children states that girls are more likely to use relational aggression than are boys. In contrast, most of the studies with adults indicate that the use of relational aggression is higher among men than women. To date, five published studies examine relational aggression among adults (Linder, Crick & Collins, 2002; Loudin, Loukas & Robinson, 2003; Storch, Bagner, Geffken & Baumeister, 2004; Storch, Werner & Storch, 2003; Werner & Crick, 1999). General characteristics found to be associated with relational aggression for adults include peer-rejection, anti-social personality, low pro-social skills, depression, lack of perspective taking, social anxiety and loneliness. Further, there is evidence to suggest gender differences in some of these areas.

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Another related area of research, directly implicating the offender population and the prison environment, is the work of Jane Ireland (2005). Ireland focuses on bullying among prisoners, and she broadly defines bullying as follows:

> *An individual is being bullied when they are the victim of direct and/or indirect aggression happening on a weekly basis, by the same perpetrator or different perpetrators. Single incidences of aggression can be viewed as bullying, particularly where they are severe and when the individual either believes or fears that they are at risk of future victimization by the same perpetrator or others. An incident can be considered bullying if the victim believes that they have been aggressed towards, regardless of the actual intention of the bully. It can also be bullying when the imbalance of power between the bully and his/her victim is implied and not immediately evident (2005, p. 5).*

Ireland's research identifies four categories of prisoners: 'pure bullies,' 'pure victims,' 'bully/victims,' and 'those not involved.' In researching these four groups, Ireland underlines that indirect and covert forms of aggression, not routinely identified as aggression, are successfully exploited in prison settings. Here, victims are gravely affected while the likelihood of the perpetrator being identified is vastly reduced. These forms of aggression take a substantial toll on victims, emotionally and psychologically, often resulting in suicide, and yet the incidents often go unrecognized and unchallenged.

Mediating variables

There is also clear evidence that, within research on gender differences in aggression, there are several mediating variables that affect the research outcome (Knight, Fabes & Higgins, 1996). Study characteristics, including type of data collection (direct observations vs. peer-parent-teacher reports vs. self-report), type of setting (field vs. laboratory), type of aggression (e.g., psychological vs. physical), type of surveillance (private vs. semi-private vs. public), and/or freedom of choice to aggress have all been identified as mediating variables.

In addition, concepts such as provocation (Bettencourt & Miller, 1996; Bettencourt & Kernahan, 1997), gender-role identity (Milovchevich, Howells, Drew & Day, 2001; Walker, Richardson & Green, 2000) and even the gender of all those involved in research experiments (Harris, 1992; Harris, 1995) have been particularly emphasized for their relevance in measurement and methodological approaches.

Within a correctional environment, gender-role identity and provocation are two constructs that have been identified as relevant for research findings pertaining to gender differences in aggression. Gender-role identity is distinct from gender in that measuring gender differences through one's selected identity as opposed to their physiological sex characteristics provides unique information. Provocation, traditionally viewed as important in the elicitation of aggression, is more complex than once believed. That is, different forms of provocation affect men and women differently, and the gender of the provoker is influential to the outcome. Gender-role identity and provocation should be given a prominent role in the study of gender differences in aggression.

Linear perspectives

The predominant and perpetuating method used in research on gender differences in aggression seems to be an inexorable linear approach. A linear approach assumes a proportional, sequential development of events. To date, most research has focused on a sequence of aggression beginning with provocation, in turn leading to anger and hostility, inevitably manifesting in some form of aggression. The core assumption suggests a direct relationship between these constructs without considering other mediating variables. Furthermore, this body of

knowledge has focused almost exclusively on physical and verbal forms of aggression, which are argued to be expressed primarily by men.

Researchers have identified the difficulties with using linear approaches in the study of emotions (Vallacher & Nowak, 1994). Linear arguments are likely to suggest that there is simply a direct relation between anger and aggression for both men and women, without considering the additional gender-relevant components that contribute to differences in aggression (i.e., mediating variables and form of aggression).

According to Lewis and Granic (2000), linear approaches may impede theoretical progress and hinder one's ability to model the relationship between goals, emotions and emotion regulation in a convincing way, in turn supporting a reductionist approach to personality processes. Furthermore, linear thinking tends to be very static in nature, not allowing for the emergence of more dynamic features of the manifestation of aggression in men and women.

Non-linear approaches to psychological research have the capacity to capture the dynamism and complexity of a variety of social psychological phenomena (Vallacher & Nowak, 1994). Lewis and Granic (2000) describe non-linear approaches as being particularly sensitive to the interactions among the relevant variables.

Non-linear perspectives

Because of the complexity of aggression, approaches that can best capture and conceptually represent this complexity are preferred. Aggression needs to be viewed as a dynamic process as opposed to a fixed and static concept. Consider for example covert, often unobservable, forms of aggression such as relational aggression (explained in the section on indirect forms of aggression). Unlike overt, observable aggression, which appears at one point in time, relational aggression is more likely to occur over a period of time. Static and linear methodological approaches preclude researchers from gathering valid data on this form of aggression; a one-time measure of this construct may actually conceal its occurrence. On the other hand, a methodology that includes a time-series analysis has the potential to reveal this temporal form of aggression. The focus is on observation of phenomena with the aim of clarifying across-time relationships among variables, temporal trends and cycles (Hokanson, Tate, Niu, Stader & Flynn, 1994).

Furthermore, by examining the dynamic relationship and interactions between gender-identity, provocation and aggression, for example, we have the potential to reveal more complex gender differences in aggression, thus providing us with greater explanatory power. Examining independent variables in isolation fails to reveal the relevance of other independent variables, and their combinations, in the varying manifestations of aggressive behaviour in men and women.

A non-linear gender-informed model of aggression

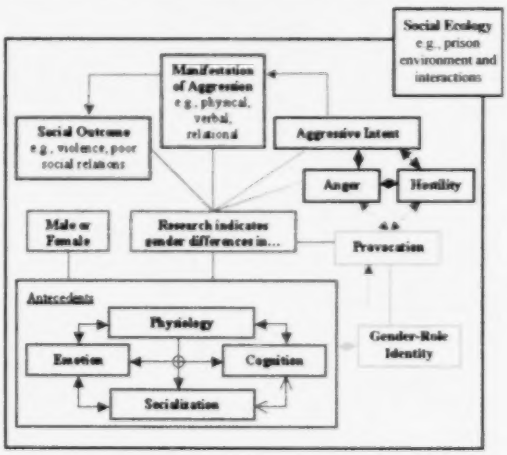
A non-linear gender-informed model of aggression has the potential to accomplish two goals: 1) to encourage researchers to consider this area by means of non-linear statistical techniques and non-linear methodologies; and 2) to place gender as a central component of the model, as opposed to introducing a paradigm that perpetuates an approach to research where gender is either 'noise' in a system or where female responses are relegated to the category of being an exception to the general rule.

Figure 1 presents a non-linear gender-informed model of aggression. Placing gender differences at the centre of this model and avoiding linear thinking in its development, this model begins to clarify the non-linear (complex) nature of aggression. Within this model, links without arrows are not proposed as causal. Links with arrows are causal, and solid lines represent certainty in the outcome while dashed lines represent that the outcome is feasible but may not always come to fruition.

At the outset, a non-linear design may not appear to differ dramatically from past efforts. Indeed,

Figure 1

A Non-Linear Gender-Informed Model of Aggression



many of the elements required for a non-linear strategy have been used in traditional linear approaches. Two factors argue for the development of a non-linear framework, however: 1) the addition of gender-sensitive and gender-relevant variables; and 2) the importance of allowing for the complexity of gender differences in aggression to be represented in research designs. With multiple variables interacting in complex manners, implementing a non-linear framework may allow previously undetected gender differences in aggression to emerge. Such a framework is not projected as a panacea, but rather as inspiration for future innovative research and methodology.

For correctional workers, such a framework may inspire a different viewpoint and perhaps a different understanding of the complexity, causes and manifestation of aggression in male and female offenders. Most Correctional Service Canada core correctional programs target aggression to some extent. For programs such as anger and emotions management, family violence and violence prevention, and treatment approaches such as dialectical behaviour therapy, targeting aggression is integral. Furthermore, current organizational initiatives such as gender-specific violence prevention programming for women, and the initiation of research on bullying in our women's facilities, emphasize the significance of this area and how it is directly implicated in the organization's priorities.

All in all, a better understanding of the nature, causes and manifestation of aggression is essential for optimal treatment success and positive correctional outcomes. ■

[1] Extract and adaptation of Taylor, K. (2006). *Traditional and new perspectives for researching gender and aggression*. Comprehensive paper submitted in partial fulfillment of Ph.D. (Psychology), University of Ottawa. Advisor: Michel Girodo.

[2] Correctional Service Canada, 340 Laurier Avenue West, Ottawa, Ontario K1A 0P9; e-mail: taylorke@csc-scc.gc.ca.

[3] See Hyde, J. (1985). *Half the human experience: The psychology of women* (3rd Ed.). Lexington, MA: D.C. Health.

[4] Effect size is a measure of the strength of the relationship between two variables. The larger the effect size, the stronger the relationship. When considering small, moderate or large effect sizes, Cohen (1988, 1992) gives the rules of thumb: small = 0.1; medium = 0.3; large = 0.5.

[5] See for example Lagerspetz, K., Bjorkqvist, K., & Peltonen, T. (1988). Is indirect aggression typical of females? Gender differences in aggressiveness in 11- to 12-year old children. *Aggressive Behavior, 14*, 403-414.

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